AMERICAN MEDICAL TIMES

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The next Volume of the AMERICAN MEDICAL TIMES will commence on Saturday, the 4th day of January, 1862, and will contain, in addition to the usual variety of matter,

CLINICAL LECTURES ON THE DISEASES OF THE URINARY BLADDER.
BY PROF. WM. H. VAN BUREN.

CLINICAL LECTURES ON THE DISEASES OF WOMEN.
BY PROF. B. FORDYCE BARKER.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL USES.
BY PROF. S. R. PERCY.

With some other papers which will be duly announced in our next number.

Bellevue Hospital Medical College.

—ANNOUNCEMENT FOR 1861-2.—The Trustees and Faculty announce, with much pleasure, the organization of this College, with a corps of thirteen Professors, and a full course of lectures during the next autumn and winter.

FACULTY.

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N. E. MOSELY, M.D., Prosector to Chair of Surgical Anatomy.
SYLVESTER TEATS, M.D., Prosector to Chair of Operative Surgery and Surgical Pathology.

PRELIMINARY TERM.

A preliminary term will commence on Wednesday, September 18, 1861, and continue until the beginning of the regular term. In addition to daily instruction in the hospital wards, and clinical lectures, at least three lectures will be given daily on subjects of practical importance, by members of the Faculty, during this term. Among the subjects which will be taken up during the preliminary term are the following:—Organic Affections of the Uterus, by Prof. Taylor; Uterine Displacements, by Professor Barker; Inflammatory Diseases of the Uterus and Appendages, by Prof. Elliot; the Thoracic Viscera, by Prof. Childs; Auscultation and Percussion, by Prof. Flint; Syphilis, by Professor Hamilton; Surgical Affections of the Genito-Urinary Apparatus, by Prof. Wood; Endosmosis and Exosmosis, with their Practical Applications, by Professor Doremus.

The attention of students and practitioners is invited to the variety and practical importance of the subjects which will be treated of during the preliminary term. Although attendance is not required on the part of the student, it is designed to render this term, not a nominal, but an actual extension of the period of instruction.

Dissections may be prosecuted during this term as well as during the whole of the regular term.

REGULAR TERM.

The regular term will commence on Wednesday, October 16, 1861, and end in the early part of March, 1862.

During the regular term the lectures will be so arranged as not to interfere with attendance in the hospital wards. Ample time will be allowed for accompanying the visiting physicians and surgeons in their daily rounds, attending clinical lectures in the hospital amphitheatre, witnessing surgical operations, and autopsical examinations, without conflicting with any of the didactic lectures.

This College, having been established in connexion with the Bellevue Hospital, offers peculiar advantages arising from the fact that the lectures in all the departments of instruction will be given within the hospital grounds. The Professors in all the practical branches being connected with the hospital, either as visiting physicians or surgeons, all the important subjects pertaining to Surgery, Obstetrics, Therapeutics, and the Practice of Medicine can be amply illustrated by cases under observation in the hospital wards, and by autopsical examinations, simultaneously with their consideration in the lecture room; loss of time in going to and from the hospital is saved; the student is always at hand when cases of accident are received, or operations in Surgery and Obstetrics suddenly called for; and there will be no encroachments of didactic and clinical instruction upon each other.

The aim of the Faculty of the College, with the co-operation of the Comsioners of Public Charities and Correction, is to make the immense hospital resources at their disposition, available to the fullest extent for purposes of instruction. In 1860, more than *eleven thousand patients* were received into Bellevue Hospital, and over *four hundred births* took place in this hospital during the year. The large hospital recently erected on Blackwell's Island, will also be open for medical instruction, and students will be conveyed to the Island by the hospital steamer without expense. It may be safely said that the vast field afforded by these Charities for the study of diseases at the bed-side, for witnessing every variety of operations in Surgery, together with the treatment of surgical affections, for the study of morbid anatomy, and the practice of obstetrics, is not surpassed elsewhere in this or any other country.

Ample provisions will be made for pursuing practical anatomy. Anatomical material will be supplied in abundance and with but little expense to the student.

Twenty-two resident Physicians and Surgeons are annually appointed on recommendation of the Medical Board of the Hospital, after an examination by this Board, and receive a salary sufficient for their support.

Fees for all the lectures during the preliminary and regular terms, $105. Tickets for any of the departments during the regular term may be taken out separately, the fees being proportionate to the number taken.

The fee for all the lectures during the preliminary term is $10. This sum will be deducted from the fees for the whole course ($105), if tickets to the latter be taken out.

Matriculation Fee	$ 5
Graduation Fee	30
Demonstrator's Ticket	5

Payment in all cases is required, and the tickets must be taken out at the beginning of the term.

The requisites for graduation are, twenty-one years of age; three years study with a regular and reputable practitioner (or practitioners), inclusive of the time of attendance at lectures; two full courses of lectures, the last in this College; proper testimonials of character; an acceptable thesis, and an examination by seven of the Professors in the several departments of instruction.

This College is endowed with all the powers and privileges belonging to any chartered Medical school in this State.

Circulars will be sent and further information given, on application to Professor Benjamin W. McCready, Secretary, No. 7 West Ninth street; or to Professor Isaac E. Taylor, President, No. 13 West Twentieth street.

Board and lodging can be obtained in New York for from $3 to $5 per week.

Students on arriving in the city are requested to report at once at the office of the College at Bellevue Hospital, situated on the East River, between Twenty-sixth and Twenty-eighth streets.

Castleton Medical College, Castleton,

VERMONT. Sixty-first Session, 1862.

CORYDON L. FORD, M.D., Professor of Anatomy.
ADRIAN T. WOODWARD, M.D., Professor of Obstetrics and Diseases of Women and Children.
GEORGE HADLEY, M.D., Professor of Chemistry.
WILLIAM P. SEYMOUR, M.D., Professor of Materia Medica and Therapeutics.
E. K. SANFORN, M.D., Professor of Surgery.
P. D. BRADFORD, M.D., Professor of Physiology and Pathology.
P. PINEO, M.D., Professor of Medical Jurisprudence.
CHARLES L. ALLEN, M.D., Professor of Theory and Practice of Medicine.

The annual course of Lectures will commence on the last Thursday of February, and continue four months.

FEES.—For a full course of Lectures, $50. Matriculation ticket, $5. Graduation fee $16.

Dissecting classes will be formed in January and February, and during the term. Anatomical material supplied at a reasonable cost.

Good board can be obtained at from $2 50 to $3 per week.

CHARLES L. ALLEN, *Dean.*

Castleton, Vermont, *Dec.* 10, 1861.

The Wood Prizes.—Bellevue Hospital.

The Prizes offered by Prof. JAMES R. WOOD, to the Matriculated Students for the Terms 1861-62, in the Bellevue Hospital Medical College, Bellevue Hospital; the College of Physicians and Surgeons, Twenty-third Street; University College, Fourteenth Street; New York Medical College, Thirteenth Street; and the Long Island College Hospital, Brooklyn, N. Y., for the best Anatomical or Surgical Preparation, to be placed in the Museum of Bellevue Hospital, will be awarded by the Professors of Surgery, Anatomy, and Physiology, in the above Colleges, on MONDAY, March 4th, 1862.

JOHN E. WHITE, Warden of Bellevue Hospital.

NEW YORK, *September* 28, 1862.

To Surgeons and Physicians. Your

attention is respectfully called to WHITE'S PATENT LEVER TRUSS. An entirely new principle; the invention of a mechanic, a gunsmith, who being frequently called upon by members of your profession to make Trusses, would be asked, "Cannot you give us something that will *lift?*" It is this *lift* which has been so long searched for, and which constitutes the *chief* difference between this Instrument and that of all others, and for which we claim that it is a radical cure Truss. A *candid* examination by the Profession is simply asked for this Instrument. Pamphlets sent to any address, gratis.

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A Practical Treatise on Coal, Petro-

leum, and other Distilled Oils, by Abraham Gesner, M.D., 8vo. New York, 1860. $1.50.

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Traite pratique d'Auscultation suivi

d'un precis de Percussion, par Barth et Roger. 5e Edit. 12mo. Paris, 1860. $1 50.

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On Obscure Diseases of the Brain,

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Original Lectures.

LECTURES ON AUSCULTATION, PERCUSSION, ETC.

DELIVERED AT THE

BELLEVUE HOSPITAL MEDICAL COLLEGE, DURING THE PRELIMINARY TERM.

SESSION OF 1861-62.

By AUSTIN FLINT, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE VIII..

Pleuritic Friction-Sound.—Metallic Tinkling.—Characters of, and Important Facts relating to, the Normal Vocal Resonance.—Exaggerated Vocal Resonance a Sign of Small or Moderate Solidification of Lung.—Diminished or Abolished Vocal Resonance a Sign of Liquid Effusion.—Bronchophony, a Sign of Complete or Considerable Solidification.—Ægophony, a Modification of Bronchophony.—Pectoriloquy, as distinguished from Bronchophony, and its Significance.—Amphoric Voice or Echo.—Remarks on the Whispered Voice as the source of Vocal Signs.—Facts pertaining to the Normal Bronchial Whisper.—Exaggerated Bronchial Whisper, a Sign of Small or Moderate Solidification of Lung.—Whispering Bronchophony, a Sign of Considerable or Complete Solidification.—Cavernous Whisper.—Whispering Pectoriloquy.—Amphoric Whisper.—Concluding Remarks.

GENTLEMEN:—There is a sign, belonging properly among the adventitious respiratory sounds, or râles, of which I have not yet spoken. I refer to a pleuritic friction or attrition sound. In the movements pertaining to the respiratory acts, the free surfaces of the visceral and parietal pleura move freely upon each other with a considerable degree of force. In the act of inspiration, the lung descends, and the thoracic walls are raised as well as expanded. The pulmonary pleural surface, and the surface of the portion of the membrane reflected over the thoracic walls, therefore, move in opposite directions. The same occurs when the lung ascends and the ribs descend in the act of expiration. Thus, in both acts the opposing pleural surfaces rub together with a force proportionate to the power exerted in the respiratory acts. In health, this rubbing together of the pleural surfaces is noiseless. The surfaces are smooth, polished, and moistened with halitus, so that the friction occasions no injury to the membrane, and no appreciable sound. When the surfaces, however, are roughened by disease, a sound is likely to be produced, and this sound becomes a physical sign of disease.

A friction sound belongs especially to the clinical history of pleurisy. In the early stage of inflammation of the pleura, the pleural surfaces are roughened with coagulable lymph. The sign is obtained sometimes, but not often, in this stage of the disease. There are two reasons for its infrequency in this stage. The lymph is now soft and does not much interfere with the freedom of the movements of the surfaces upon each other; and the respiratory acts are apt to be restrained by acute pain. In a short time liquid effusion usually takes place in sufficient quantity to separate the surfaces or compress the lung into a small space; then the friction sound, if it have previously existed, does not continue. You must not expect, save in occasional instances, to have the benefit of this sign in the diagnosis of pleurisy prior to liquid effusion, and still more rarely when the affected side of the chest is more or less filled with liquid. Happily the sign is not important for the diagnosis, other physical phenomena, taken in connexion with the symptoms, being quite sufficient.

It is, however, frequently present in a later period of the disease, when the liquid effusion has been in a great measure absorbed. The lung now expanding so as to bring the pleural surfaces again into contact over a large space, and the lymph having now become dense, the physical conditions for the production of a sound are present. The sign is, therefore, of not much practical value in diagnosis; hence, it is to be presumed that the nature and seat of the disease have been already determined. It is of utility in some cases, in which patients do not come under our observation until the disease has passed to the third stage, *i. e.* after absorption of the liquid effusion; but in this stage we have generally the contraction of the chest to guide us in the diagnosis.

The intensity and character of pleuritic friction sound vary considerably in different cases. Sometimes a slight grazing or rubbing only is perceived. It is rarely more than this in pleurisy, prior to the stage of effusion. But sometimes the sound is loud, and rough, so that it may be described as rasping or grating in character. It may be perceived by the patient. Several instances have fallen under my observation, in which the character of the sound has been accurately described by the patients. One of these was the case of a female patient recently in this hospital. The sound may be heard without auscultation, at a distance from the patient. In these instances, the pleurisy has advanced to the third stage, but close adhesion of the pleuritic surfaces has not taken place. The cessation of the friction sound denotes the occurrence of adhesion. The duration of the sound in this stage of the disease is variable. I have known it to continue for several weeks, the patients having convalesced sufficiently to be up and out of doors. It may persist even for months.

The sign occurs, not only in primary pleurisy, but when circumscribed pleuritic inflammation exists as a complication of another pulmonary affection. It is heard not infrequently in cases of pneumonia, more or less pleurisy, limited to the affected lobe, or lobes, generally co-existing. It is a sign of considerable diagnostic value in some cases of tuberculosis. The dry circumscribed pleurisies so generally occurring in the progress of tuberculous disease, may be accompanied by a friction sound which, under these circumstances, is limited to a small space at the upper part of the chest. A friction-sound, thus limited, is one of the group of accessory signs which concur to render the proof of tubercle complete when a positive diagnosis cannot be based on the ordinary signs usually present if the tuberculous deposit be abundant.

How is friction-sound to be distinguished? Generally there is no practical difficulty in the discrimination, if the distinctive characters are borne in mind. The sound usually accompanies both acts of respiration. It is a to and fro sound, *i. e.* heard both in inspiration and expiration. It may, however, be limited to inspiration. It may continue during the whole, or be present in only a part of one or both of the respiratory acts. It may be a continuous sound in either act, or it may be interrupted, sometimes consisting of a series of disconnected sounds. Whether feeble or loud, soft or rough, a friction sound appears to be superficially situated. The mind readily appreciates an apparent distance from, or proximity to, the ear in thoracic sounds; and this sound seems to be near the surface. It seems, indeed, sometimes to emanate from the surface, and we look to see whether the clothing does not rub against the stethoscope. It is hardly necessary to caution you to guard against this source of deception. The sound itself conveys the idea of rubbing or friction. In cases of primary pleurisy, it is usually limited to, or heard loudest at, the lower part of the chest. After having had a few practical illustrations, you will very rarely have any difficulty or doubt as regards its recognition.

In entering now upon the consideration of the auscultatory signs produced by the voice, I shall first notice a sign properly embraced in the category of vocal signs, although it is not produced exclusively by the voice, but also by re-

spiration, by coughing, and sometimes even by the act of deglutition. I refer to the sign known as metallic tinkling. This name is descriptive of the sound. It conveys the idea of a metallic vessel being struck with a small body, for example, a pin; or, to borrow another illustration, it is like the sound caused by dropping small shot into a metallic basin. The sound is so distinctive, and the name so expressive, that you would hardly fail to recognise it, were you to meet with it before it had been pointed out to you at the bedside. A single tinkling sound only may be heard, but generally, with the act of speaking, a series of tinklings, two, three, or more, is produced; so, also, with the inspiratory and expiratory acts, either or both.

Without discussing the mechanism of this sign, it suffices to say that clinical experience shows it to occur when air and liquid are contained within the pleural sac, constituting the affection known as pneumo-hydrothorax. It is so distinctive of this affection, that it may almost be called a pathognomonic sign, being one of the very few physical signs having a claim to that appellation. It has, however, been observed in connexion with a very large tuberculous cavity, the same physical conditions here existing, viz. a large space containing liquid and air. Pneumo-hydrothorax, as you know, is due generally to perforation of the lung occurring in the course of tuberculous disease. The perforation is, perhaps, necessary for the production of the sign; at all events, it contributes to the production of it. Clinical observation and experiments on the cadaver show that the tinkling sounds are caused by the explosion of air bubbles, either at the point of the perforation, or on the surface of the liquid. And perhaps it may be also caused, as Laennec supposed, by drops of liquid falling from the upper part of the cavity. In the case of pneumo-hydrothorax, now in hospital under our observation, the sign is wanting. So far as my experience goes, it is rare not to find it in cases of this disease. I infer from its absence, and other facts, that, in this case, the perforation of the lung has nearly or quite closed. Amphoric respiration, and amphoric voice, are correlative signs which are also present in the great majority of the cases of pneumo-hydrothorax. These signs are wanting in the case now under observation, and probably for the same reason that metallic tinkling is absent. As we have already seen, the diagnosis of the affection is sufficiently positive even when all these highly distinctive auscultatory signs are not available. The evidence afforded by percussion and succussion, is quite sufficient for the diagnosis.

Before proceeding to give an account of signs which are due exclusively to the voice, we must consider the characters belonging to the vocal sounds heard in health. In auscultating the voice in health or disease, the best plan is to cause the patient to enunciate, slowly, the numerals, one, two, three. This secures a more equal vocal effort for a comparison of the two sides, than when we ask some questions relating to his condition. It is an objection to the latter mode that the attention is somewhat divided between the information which the answers of the patient convey, and the auscultatory phenomena. What do we hear with the ear or stethoscope applied to the chest, when a healthy person speaks?

Applying the ear or stethoscope to the upper anterior surface of the right side of the chest, we generally hear a distant, diffused reverberation of the voice, or resonance, accompanied, usually, with more or less vibration or fremitus. This is called the normal vocal resonance. The resonance proper, is the distant, diffused reverberation of the voice. The vibration or fremitus is superadded. The former is the acoustic sign; the latter is the sign obtained by palpation. Bear in mind, gentlemen, the characters of this normal resonance, as expressed by the terms distant and diffused.

I have specified the upper anterior surface of the right side of the chest, as the place to which the ear or stethoscope is to be applied. Why so? It is here that the normal resonance is most marked in health. It is more marked here than in any other part of the right side, and, next to this situation, it is best heard behind—below the scapula. But it is everywhere more marked on the right, than on the left side. This law is invariable. The disparity is greater in some persons than in others. The resonance may be wanting on the left, and more or less marked on the right side. Its intensity differs very much in different healthy persons. It is loudest, other things being equal, in those who have strong low pitched voices. In females, it is not infrequently wanting everywhere. These are the important facts pertaining to the normal vocal resonance. We have now to inquire, what are the modifications due to disease?

The vocal resonance may be simply exaggerated. There is no change in the characters which it has in health, save that its intensity is increased. This is one of the vocal signs of disease. It is called exaggerated vocal resonance. Of what physical change is it a sign? It denotes a certain amount of solidification; not complete or even considerable solidification, but a small or moderate amount. The value of this sign has relation, chiefly, to the diagnosis of tubercle. A frequent effect of a small or moderate tuberculous deposit, is an increase of the intensity of the vocal resonance. The two sides at the summit, therefore, are to be compared in this regard in seeking for the presence or the absence of the signs of a deposit. And here, as with regard to the breathing sounds, it is essential to take into account the normal disparity. And here, too, the disparity is such, that when we find the resonance considerably greater on the right side, we may be at a loss to determine whether it be a normal disparity, or denote an affection of the right side. Experience qualifies us to form a judgment in such cases, and we are guided, in a measure, by the coexistence of other signs. But if we find the vocal resonance greater on the left side, or even equal to that on the right side, we may decide, at once, that it is exaggerated by a morbid condition. This sign is a very valuable one in the diagnosis of certain cases of tuberculous disease, especially when the deposit is on the left side.

Abnormal weakness or abolition of the normal resonance, is another sign of disease. Pleuritic effusion produces this effect. Suppose a patient to have flatness extending from the base of the chest upwards, more or less, on the right side. The question arises, is this flatness due to liquid effusion or solidified lung? If due to the latter, we may expect to find a modification of the vocal resonance, presently to be described. If due to the former, the resonance will be likely to be weaker than in health, or entirely wanting. Weakness, or absence of resonance, thus becomes an important sign of liquid effusion.

I have assumed the effusion to exist on the right side. We determine that the resonance is weakened or abolished by a comparison of the two sides. Now, it being weaker on the left side in health, and sometimes wanting on the left, while it exists on the right side, we cannot so well determine that it is morbidly weak or wanting on the left, as we can on the right side. If the resonance be greater on the left side than on the right; or, if it be equal on the two sides; or, again, if it be absent on the right, and present on the left side, it is certain that it is morbidly diminished or abolished on the right side, provided the resonance on the right side be not morbidly increased. It is thus evident that this sign is more available in the diagnosis of liquid effusion into the right than into the left side of the chest.

Another vocal sign, and one of great value, is called bronchophony. What are the distinctive characters of this sign? The voice, instead of being distant and diffused, is concentrated near the ear and raised in pitch. When these modifications are present, we have bronchophony. What is the signification of this sign? It denotes complete or considerable solidification of lung. As a rule, wherever the lung is completely or considerably solidified, this sign is present. It is correlative to bronchial respira-

tion, it corroborates the evidence afforded by the latter, where the two signs co-exist. It may be present when the bronchial respiration is wanting, and then it is our chief reliance in determining the fact of solidification of lung.

Observe the points of distinction between exaggerated vocal resonance and bronchophony. In the former, the resonance is still distant and diffused; the intensity of the sound is alone affected, and the accompanying fremitus is also often increased. In the latter, the intensity of the sound may not be augmented, but the voice seems to enter immediately into the ear, and it is high in pitch. The fremitus may or may not be increased.

Bronchophony is usually well marked in the second stage of pneumonia. When resolution is going on, and the bronchial gives place to the broncho-vesicular respiration, the bronchophonic voice disappears, and gives place to exaggerated vocal resonance, the latter being succeeded by the normal resonance when the exudation is entirely removed. Not infrequently the deposit of tubercle is sufficiently abundant to give rise to well marked bronchophony. The sign is then evidence of the amount of the deposit.

I may here notice a vocal sign, on which I do not care to dwell but for a moment. I refer to the sign called ægophony. The name is based on the resemblance of the sound to the bleating of the goat. Although goats are not very abundant in this country, all of you are probably familiar with the peculiar cry of that animal. The peculiarity consists in a high pitched, tremulous sound. When the voice presents these characters, viz. highness of pitch and tremulousness, we have ægophony. These modifications, however, must not belong to the oral voice, but be produced in its transmission through the chest.

Ægophony was considered by Laennec as a sign of a certain amount of pleuritic effusion. It is still to be regarded as having this signification. But it is a sign of very little practical value, because it is so rarely observed, and the other signs of effusion are ample for the diagnosis. The sign requires for its presence a certain amount of liquid; it is heard only for a brief period during the progress of effusion, or of its resorption, and, unless cases are examined daily and frequently, it is likely to escape observation. It is most likely to be found near the lower angle of the scapula than elsewhere. It would answer every practical purpose to consider this sign as a variety of bronchophony. It differs from bronchophony in being tremulous and not having the same proximity to the ear.

Another vocal sign is called pectoriloquy. What is pectoriloquy? Were you to put this question to many who have some smattering of auscultation, I imagine you would fail to get a correct answer. After examining the chest of a tuberculous patient, it is a common thing to be asked if there be pectoriloquy. You may be sure that when this inquiry is made, the inquirer has not a correct idea of the sign thus designated. It is apt to be confounded with bronchophony. This is not strange, inasmuch as Laennec himself, in point of fact, confounded these two signs. One of the few blemishes to be found in the great work of Laennic, relates to pectoriloquy. Clear and accurate as were his observations in general, his mind was evidently biased with regard to this sign. He committed his judgment too hastily to the conclusion that it was exclusively a cavernous sign, and generally present when cavities exist. Hence, he was led to describe three varieties of pectoriloquy, viz. complete, incomplete, and doubtful. Now, it is evident that the so-called incomplete and doubtful varieties are not entitled to be called pectoriloquy, but are neither more nor less than bronchophony.

The distinction between bronchophony and pectoriloquy is simply this: the former is the transmission of the voice, and the latter the transmission of the speech. In bronchophony the voice is near the ear, but in pectoriloquy there is more than this, the articulate words are perceived by the auscultator. You have only to discriminate between the voice and the speech to appreciate fully the distinction. To the novice in auscultation, mere bronchophony may, without due attention, seem to be pectoriloquy. The voice is sometimes transmitted with such intensity, that, knowing beforehand the words which are spoken, it is imagined that they are distinctly transmitted through the chest. This error may be obviated by asking a question, the answer to which is not already known. Care must also be taken to close the ear which is not applied to the chest, if immediate auscultation be practised, so as to prevent hearing the words as coming from the lips.

Accurately defined pectoriloquy is an extremely rare sign. The great infrequency of its occurrence alone, is enough to render it of very small practical value; but it is entitled to very little consideration for another reason, viz. it has not the definite signification attributed to it by Laennec. All experienced auscultators are now agreed that it is not exclusively a cavernous sign. It is probably true that it oftener occurs over solidified lung than over a cavity. In short, it is chiefly of interest as one of the curiosities of auscultation, and were it to be expunged as a distinct physical sign, its loss would scarcely be felt.

An important vocal sign is distinguished as amphoric voice or amphoric echo. I have already defined the term amphoric, as applied to percussion and breathing sounds. Its sense is the same when applied to a vocal sound. It means a musical intonation. Whenever the voice is accompanied by a musical sound, it is said to be amphoric. It is called amphoric echo because the musical sound follows the voice like an echo. A high pitched musical sound following the voice, is a sign of pneumo-hydrothorax. It is correlative to amphoric respiration, and is produced by the same mechanism. Metallic tinkling will generally be associated. All the signs just named go together, and are quite distinctive of pneumo-hydrothorax; if either be wanting, the others will be likely to be absent, and if one be present the others will generally be found.

Amphoric echo may be due to a large tuberculous cavity. It is rare for the sound to be as high pitched and as musical, under these circumstances, as in cases of pneumo-hydrothorax. An approximation to the amphoric voice characteristic of that affection, is sometimes heard, and, excluding pneumo-hydrothorax, it may be considered as a reliable cavernous sign.

In concluding the subject of auscultation, gentlemen, I shall ask your attention to a brief account of several vocal signs produced by the whispered voice. With a single exception, I am not aware that these signs have received any attention from auscultators prior to my own observations. They seem to me to form an interesting and important group of vocal signs, and it is surprising that they have not earlier attracted notice. But it is to be recollected that Laennec overlooked the important characters of different signs pertaining to the expiration. The study of the expiratory sound was commenced by one of our countrymen, the lamented James Jackson, Jr., of Boston. In the course of these lectures I have pointed out important distinctive characters of breathing sounds, derived especially from the pitch of the expiration as compared with that of the inspiration. Now, the vocal signs produced by the whispered voice correspond, as we shall see, with the respiratory signs, so far as the latter involve expiratory sounds, the act of whispering being, in fact, an act of expiration.

We must here, as elsewhere, start from the healthy sounds. What do we hear when the ear or stethoscope is applied to the chest of a person in health, and whispered words are pronounced? The best plan is to request the numerals, one, two, three, to be enunciated distinctly and deliberately; each numeral is then pronounced with a separate expiratory effort. If the ear or stethoscope be applied at the summit of the chest, accompanying each word is a soft bellows or blowing sound. This sound is more or less loud; it varies considerably, in this regard, in different persons. In some persons it is wanting. As a rule, it is not

heard in health, except at the summit in front and behind, and it is louder in front. It is loudest over the situation of the primary bronchi. We may call this the normal bronchial whisper.

Is the normal bronchial whisper equal on the two sides of the chest? It is not. There is a disparity here as with regard to the respiratory murmur and the vocal resonance. The whisper is louder on the right side. The difference in the intensity of the sound between the two sides is more or less marked, persons differing in this respect. Another point of disparity is to be borne in mind: the pitch of the whisper is higher on the left side. This law is invariable in health, as well as the law as regards the greater intensity of sound on the right side.

Now, what are the abnormal modifications of the normal bronchial whisper? It may be increased in intensity, and raised in pitch by disease, in the situations in which it is heard in health. If the increased intensity and acuteness are not strongly marked, we may call the sign exaggerated bronchial whisper. The sign denotes small or moderate solidification of lung. It is correlative to bronchovesicular respiration and exaggerated voice resonance. It is a valuable sign in the diagnosis of tubercle. I have long attached to it considerable importance in that connexion. In comparing the two sides of the chest at the summit, the points of disparity which have been mentioned must be recollected. A greater intensity on the right side may not be a morbid sign, but if, with greater intensity, the pitch is higher than on the left side, it is a sign of disease, *i. e.* of a solidifying deposit. But a greater intensity on the left side is evidence of disease. With these facts in the mind, the whispered voice will often be found to furnish strong positive or negative evidence in cases of suspected tuberculous deposit.

If there be considerable or complete solidification of lung, we have something more than an exaggerated bronchial whisper. The blowing is intense, the pitch is high, and the sound seems to be near the ear. These characters are not only present in the situations where the normal bronchial whisper is heard, but also where the whispered voice produces no sound in health, *i. e.* over the middle and lower thirds of the chest. A sound presenting the characters just mentioned, is almost invariably heard in the second stage of pneumonia, whether the upper or lower lobes are affected; and also in cases of an abundant deposit of tubercle. I call this sign whispering bronchophony, because it is analogous to bronchophony as produced by the loud voice. Its significance is the same. The two signs are usually associated, and both are correlative to the bronchial respiration. Whispering bronchophony sustains the same relation to the exaggerated bronchial whisper, as ordinary bronchophony to the exaggerated vocal resonance.

I distinguish another sign as the cavernous whisper. This sign, as the name implies, is distinctive of a cavity, and is a reliable cavernous sign. It is characterized by lowness of pitch. A low pitched, more or less intense blowing sound with the whispered voice, if developed by disease, proceeds from a cavity. Such a sound never proceeds from solidified lung: the pitch is then always raised. The cavernous whisper is correlative to the cavernous respiration which has been described in a previous lecture. Like the cavernous respiration, it is by no means present whenever cavities exist. It requires conditions for its production similar to those requisite for cavernous respiration, viz. a cavity of considerable size, empty, with free communication with the bronchial tubes, the walls not rigid, and its situation near the superficies of the lung. It is sometimes, however, marked when cavernous breathing is not distinct. And as cavernous breathing is sometimes manifested, as it were, in relief, by bronchial respiration surrounding the circumscribed space in which the cavernous breathing is heard, owing to the cavity being surrounded with tuberculous solidification, so the cavernous whisper, for the same reason, is sometimes presented in striking contrast with whispering bronchophony surrounding a circumscribed space corresponding to the site of the cavity.

We can understand why the cavernous whisper should be a low pitched sound, and why whispering bronchophony should be a high pitched sound, when we consider that the act of whispering corresponds with the expiratory act. A clear, loud whisper is performed by an act of expiration more forcible than in ordinary breathing. Hence, for precisely the same reason that solidification of lung gives rise to the intense high pitched expiratory sound belonging to the bronchial respiration, it should give rise to a high pitched intense blowing sound with the whispered voice; and for precisely the same reason that in cavernous breathing the expiratory sound is low in pitch, the cavernous whisper should be low pitched.

Whispering pectoriloquy is the exceptional sign referred to as having engaged the attention of auscultators. Whispered words are sometimes distinctly transmitted through the chest. Dr. Walshe thinks that this sign is more reliable, as a cavernous sign, than ordinary pectoriloquy. I am obliged to differ from him in this opinion. In my experience, whispered words are quite as likely to be transmitted through solidified lung as the loud speech.

Finally, the whispered voice, as well as the loud voice, may give rise to a musical sound. We may thus have an amphoric whisper. The whispered voice is quite as likely to give rise to an amphoric sound, as the loud voice, if not more so. The characters and the significance are the same in the two cases, and I need not therefore dwell upon this as a distinct sign.

My short course of lectures, gentlemen, on Auscultation, Percussion, and the other methods of physical exploration, is now ended. I have not time for any extended concluding remarks. I have endeavored to occupy the hours assigned to me in the most profitable manner, by confining myself to the consideration of the subjects almost exclusively in their practical relations. As regards the importance of the province of practical medicine which we have passed over in these lectures, I have only to repeat what I said at the beginning of the course; I am quite satisfied to leave you to form your own conclusions during the clinical studies which we are to pursue together in this hospital during the coming winter. I venture to hope that my course will be useful in preparing you to engage in these studies. This has been my aim, and I shall be happy if I have reason to believe that it has proved successful.

Opening of the National Dental Hospital—Dental Surgery is making rapid progress in the metropolis. On Tuesday night the new Dental Hospital in Great Portland-street was inaugurated, Dr. Brady, M.P., in the chair. The attendance of London and country dentists was very numerous. In an able introductory address, the Chairman dwelt on the importance of the Institution, not only as a school of dentistry, but as a means of affording relief to the various poor persons who suffered from diseases of the teeth. A series of resolutions were unanimously passed, in which the meeting pledged itself to support by all means in its power the new Hospital. A late dinner afterwards took place, to which about fifty gentlemen were invited. The toasts were numerous and drunk with enthusiasm, particularly those which referred to Dr. Brady, Mr. Robinson, and Dr. Richardson.—*Lancet.*

The Regular Medical Schools of Cincinnati (*Lancet and Obs.*) have each about sixty students in attendance on lectures this winter. The introductory lecture of the Medical College of Ohio was delivered by Prof. Sayler. No introductory was given in the Cincinnati College of Medicine. Thus far we hear but meagre reports of the schools; we understand, however, there are no lectures in Louisville or St. Louis.

The number of medical students in Dublin is 806, against 487 in 1856.

Original Communications.

PAPERS ON

MINERAL WATERS AND THEIR USES.

EMBODYING THE TWO DISCOURSES PRONOUNCED BEFORE THE NEW YORK COUNTY MEDICAL SOCIETY.

By HANBURY SMITH, M.D.,

OF NEW YORK.

No. IX.

In corroboration of the correctness of my position regarding the intimate association of migratory venous congestion with the hæmorrhoidal diathesis advanced in previous pages, I offer the following note from *Holland's Medical Notes and Reflections*:—"I have notes of some singular cases of this kind (sudden translation; involving in some cases, it may be, mere transference of blood, as where bronchitis supervenes upon hæmorrhoids; but in other instances changes in its quality, produced by the new and altered secretions which take place)—one, for example, in which there existed for many years a frequent and well marked alternation of headaches with hæmorrhoids; each very severe in degree and both almost altogether removed by the supervention of chronic bronchitis; which latter disorder has since continued, constantly and severely, for a long period of years. In the same case I have repeatedly seen a temporary translation for a few hours to the head, producing even delirium; which again was as suddenly relieved by the recurrence of a copious bronchial secretion. The connexion distinctly marked between bronchitis and hæmorrhoids, I have correctly noted in several instances." I had not read this note when composing my previous papers, and am therefore all the more pleased to find such an authority as Sir Henry Holland entertaining the same views, founded on similar original observations. It may not be without suggestive value to others, to relate the somewhat ludicrous incident, which, more than twenty-five years ago, first directed any attention to the "hæmorrhoidal diathesis." Scene, my office. Enter a Swedish peasant, looking as if nothing had ever ailed him, "Please, sir, I've got the hæmorrhoids in my head." The piles in your head! thought I, not yet thoroughly posted in all the expressions applied to disordered conditions in the vernacular of the North; the piles in his head! what does the man mean? It would not do to confess ignorance; so by beating about the bush, with skilful cross-questioning, I ascertained that he was subject to habitual hæmorrhoidal congestion, with occasional fits of piles, which congestion having abandoned its proper locality, had migrated to the lateral sinuses and the veins emptying therein, producing the peculiar hæmorrhoidal headache, which was relieved at once by the laxative effect of a little sulphur and cream of tartar. This was lesson the first; the latest received is contained in the information which has just reached me from Ohio, that in one of the most obstinate cases I was ever called upon to prescribe for, where several operations had been performed, and the pruritus ani embittered an otherwise unusually happy life, the old symptoms have all disappeared on the occurrence of so-called asthma—probably chronic bronchitis, of which disease an older brother, of the same constitutional characteristics has just died, after many years of suffering.

By easy steps we pass to the subject of *diabetes mellitus*—glucosuria; not indeed a disease of the urinary apparatus, as its names would indicate, but of the liver, affecting its glyco-genic or sugar-making function; hence more properly considered among the disorders of the digestive organs, might I not say of the portal system? From a very early period warm calcareous waters have been found to restrain the thirst of diabetic sufferers better than other fluids, and cold lime-water has been much employed for the same purpose. Increasing experience gradually led to the employment of the stronger alkaline waters, especially the very hot ones; and it is now well known that a considerable proportion of cases may be permanently cured by their use in the first stage, before tuberculosis or other serious organic lesion has rendered them hopeless. In my opinion Carlsbad stands at the head of the list. I have no statistics at hand; but not only do some of the latest French authorities acknowledge its value—which is allowing a good deal, considering their extravagant faith in their own thermal alkaline, Vichy—but I find several cures effected by its use recorded by my friends, Professors Huss and Malmsten, of Stockholm. The absolutely curative powers of this water are moreover demonstrated by the observation thus published by Rotureau:—"Experience has proved that good results are obtained in cases of diabetes treated at Carlsbad, *although no change be made in the usual diet*." No diet indeed could do more than restrain certain effects; it could never be expected to modify favorably the pathological origin. An observation quoted by the same French authority, shows very conclusively the positive danger which may arise from the too free adoption of the ante-diabetic diet, while with the knowledge we now possess it suggests a grave doubt as to its advisability at all, as part of a strictly scientific treatment of the disease. "He (Dr. Oesterreicher) prescribed for a patient with diabetes mellitus, of which he was entirely relieved, though after a prolonged treatment (at Carlsbad). The following year he returned to consult the doctor, but by no means for the original disorder. An attentive examination revealed the existence of a considerable hypertrophy of the liver, great tenderness in the hepatic region, and extreme difficulty of digestion. M. Oesterreicher was of opinion that this new condition was caused by the too exclusive use of animal food and spirituous liquors, in which the patient had indulged too freely during the winter. He advised him to return to his former mode of life, and he left Carlsbad in perfect health, which he still retained four years afterwards."

Dr. Alonzo Clark has made known his successful treatment of quite a number of cases, and palliation of others by the use of bi-carbonate of soda alone; and Pavy has found by direct experiment that "the introduction of carbonate of soda into the circulation prevents the production of saccharine urine after lesions of the sympathetic nerve, otherwise occasioning it." Now, the waters of Vichy, being very much richer in carbonate of soda than those of Carlsbad, might be thought more applicable in diabetes, if carbonate of soda be all that is required; yet one of their warmest native eulogists—Durand-Fardel—says, that although their administration always diminishes the quantity of sugar present in the urine, even when it disappears entirely, it always returns, though in smaller quantity. If Carlsbad be, as I am quite prepared to believe, vastly superior to Vichy in the treatment of the disease in question, a part of the explanation may be sought in the fact that Vichy is scarcely more than a solution of bi-carbonate of soda, while Carlsbad contains quite a large proportion of the sulphate and muriate, the former being depletive of and derivative from the liver, the latter tonic to the whole apparatus of digestion. That I am right in my view is sustained by the following, reproduced from a letter on Kissingen, in the London *Medical Times and Gazette*, of March 30, 1861:—"Cases of diabetes are generally sent to Carlsbad; but that the springs of Kissengen have also a salutary effect upon this terrible disease, is shown by the case of a patient who, in 1858, was under the care of Dr. Erhard, of this place. This patient had suffered for several years from periodical hæmorrhoidal disturbances and congestion of the liver; and in 1857 he was first attacked by diabetes, which, in spite of the usual treatment, took such a severe form that the patient was given up. He was then ordered to drink Rakoczy, more with the view to relieving thirst and constipation, than in expectation of any radical cure. After he had taken ten bottles,

the amount of sugar was very much diminished, and after forty bottles had been used, no trace of sugar was to be found in the urine, while at the same time the general health was greatly improved. In the further progress of the treatment, the quantity of urine was much diminished, and at last reduced to its normal average. The patient was, in fact, perfectly cured, and has remained so up to this time. The cause of diabetes in this case was probably abdominal plethora and congestion of the liver. M. Schiff has proved that an increased quantity of blood in the liver is alone sufficient to cause diabetes, without any further pathological disturbance of the liver, the nervous system, or alteration in the chemical composition of the blood. The liver, in which sugar is normally produced, forms, if congested, more sugar than is decomposed and consumed in the blood, so that the surplus is excreted in the urine. The curative effect of the Rakoczy in cases of this kind is easy to be understood, as it relieves abdominal plethora and hyperæmia of the liver; while no beneficial effect can be expected of it in cases of diabetes which are combined with diseases of the brain, consumption, etc." I will add that as the chloride of sodium, in which the waters of Kissingen abound, has the power of largely increasing the excretion of nitrogenous compounds, the diet of almost exclusively animal food, commonly prescribed, may doubtless be more freely indulged in while using them, than some others poor in that salt.

In the paucity of observations it must not be forgotten, that of thirty cases which Dr. Barthez observed an indefinite number of years after their treatment at Vichy, seven remained absolutely well. I think it probable that an artificial water, made on the model of Carlsbad, but richer in sulphate and muriate of soda, as well as iron and manganese, might prove a superior remedy for diabetes to any other known, especially considering the tendency of a long continued use of alkaline medicines to produce a peculiar impoverished condition of the blood—alkaline cachexia—of which Rotureau gives two fatal cases observed by himself, and to favor the development of organic disease.

What the value of balneologic treatment alone or as adjuvant is, we have no means of judging rationally; for the purpose of introducing soda into the circulation, simultaneously with stimulation of the cutaneous functions, the warm baths employed at Carlsbad and Vichy are doubtless not without their value; but it appears to me more advisable to administer the soda by mouth, and to stimulate the skin by exercise in warm woollen underclothing, keeping it *in condition* by an occasional Russian, or, preferably, Turkish bath. I form this opinion, in part, from finding absolute cures by simple hydropathic treatment, recorded by such authorities as Magnus, Retzius, and Malmsten.

Bright's Disease—Albuminuria, also belongs to the transition class now under consideration. I have neither original observations to offer on its hydro-mineral treatment, nor can I find any exact ones recorded, very few experiments having hitherto been made. Helfft recommends the ferruginous waters for the relief of the anæmia, which might have been expected; but Rotureau avers that some unexpected good effects in well defined cases have been effected by the internal use of those of Ludwig's-brunnen, at Mehadia, in Hungary; thermal, weak sulphurous common salt, without iron. It is stated that numerous cases are annually treated at Kissingen, and that complete cures are effected. One general rule is laid down by authors, namely, that all mineral waters are contra-indicated when dropsy is present, touching which rule I have to enter a caveat, for in rational doses, instead of the enormous ones prescribed at the springs, they cannot be contra-indicated, and may yet prove valuable remedies.

Gravel and Calculus.—Nobody expects to effect much in the way of removing concretions already existing in the kidneys or bladder by means of any internal medication. It is however unquestionable that a subsidence of irritation and a tolerance of the presence of the calculi may be effected by judicious hydro-mineral treatment, and, whether expelled or retained, a tendency to further formation corrected. This is most remarkable in the uric acid diathesis, quite as much when shown in the calculous as in the gouty variety; and as in the latter, so in the former, the alkaline waters are especially indicated, at least at the commencement and as the basis of the treatment. Unquestionably a proper use, especially of the *thermal* alkalines, tends to secure the expulsion of the calculi; at the same time, if the patient have been subject to nephritic colic (attacks of gravel), the tendency of too free a use of the waters to excite such attacks, should be borne in mind; and if the kidneys are very excitable, it may become necessary to abandon the use of the stronger alkalines for the slightly mineralized sodaic, or even the calcareous, provided there be also considerable excess of carbonic acid present. A free use of these as simple diluents, they being much more easily digested than ordinary potable waters, may indeed prove very serviceable to palliate symptoms, though inert vis-à-vis the diathesis.

In *oxaluria* and *phosphuria*, the weakest alkaline, or, preferably, bi-carbonated calcareous waters are alone admissible, and prove eminently serviceable; and in proportion to the frequency and severity of the attacks of nephritic colic, is the necessity for a recourse to their use. Contrexeville in France has an immense reputation in these cases.

There is a class of *hæmaturias*, of which the most important pathological element is passive congestion of the kidneys, leading to exudation. All that I have seen have been referable to the hæmorrhoidal diathesis, and are quite amenable to hydro-mineral treatment. The French boast the good effects of their favorite Vichy; I should think its use only indicated in complex cases to modify a uric acid diathesis; but even then should dread the effects of the excess of alkali, and prefer much milder waters. The caution already given when speaking of phthisis, not to administer too large a quantity of fluid at once, should be borne in mind, though less imperative, in treating hæmaturia. The Kissingen Rakoczy I have more confidence in than any other; and administered in carefully graduated doses, it has effected the happiest results. The following case is illustrative: T. R., M.D., æt. 53, has been subject to piles thirty years, the annoyance arising therefrom increasing, and latterly accompanied with obstinate constipation; six months previously to the date of this history, suffered extremely from a superficial ulcer, just within the margin of the arms. About eleven years before, after eating largely of strawberries, suffered an attack of bloody urine. The following year the same thing recurred, and it was now observed that eating apples also caused a relapse. The attacks lasted longer and longer, the last one over a year, the slightest indiscretion in diet causing a great increase in the amount of hæmorrhage. Sometimes, during a temporary lull, there would only be a copious dark brown red sediment in the urine, with mucus. The patient had become exceedingly anæmic and feeble, walking two blocks with difficulty, supported by cane and the arm of another person. A careful examination of this very unpromising case (I have neglected to mention that there was also hereditary tendency to organic disease of the kidneys), convinced me that it was one of migratory hæmorrhoidal congestion, and that if no organic disease was yet established, cure, or at least great relief, might be accomplished; but as the symptoms had been much aggravated by a visit to Saratoga and the use of Congress water, there was only too much reason to dread the worst. I prescribed a cautious use of the Rakoczy, which brought on a genuine hæmorrhoidal attack during the first days of its use. This was highly encouraging; it was prescribed more freely; the frightful suffering after each stool began to diminish, in three months was gone. The urine gradually recovered its normal character, though indiscretions in diet still occasionally cause a darker tint in that fluid; a hint not to be neglected. The piles seem to have subsided for good, and the patient is strong and hearty, actively engaged in busi-

ness, and walking five or six miles a day without difficulty or fatigue.

REPORTS ON
RECENT IMPROVEMENTS IN MATERIA MEDICA AND THERAPEUTICS.

By EDWARD H. JANES, M.D.
OF NEW YORK.

I.

ANACAHUITE WOOD.—NITRIC ACID IN INTERMITTENT FEVER.—PENGHAWAR-DJAMBI.—PROPYLAMINE.

ANACAHUITE WOOD.

The first notice we have of this reputed remedy for consumption was through the columns of the *Criminal Zeitung*, a German paper published in this city. Something more than a year ago a Berlin correspondent of the above-mentioned paper stated that the Prussian consul at Tampico had informed his government of the existence of this wood, and its successful employment in the treatment of tubercular consumption. This information induced the government to test the efficacy of the remedy in the Charité, without however meeting with the satisfactory results that were expected from the representations of the consul. From a subsequent article, in the same paper, from the pen of Dr. Krog of this city, formerly of Berlin, it appears that further experiments were more successful, producing complete resorption of the tubercles in the first stage of the disease, and often affording great relief in the more advanced cases. The failure in the first series of experiments he thinks was due to the defective mode of preparing the wood. This subject attracted the attention of Prof. Maisch, now of the New York College of Pharmacy, who wrote to Dr. Krog (see *Am. Jour. Pharm.*, March, 1861), and received in reply a corroboration of the above statements, although he was not able to give its botanical origin. It is given in the form of decoction made with from ʒ vj. to ʒ j. of the wood and ʒ xij. to ʒ xiv. of water boiled down to ʒ v, which is to be taken two to four times daily, combined with other remedies. This should be continued for several months, due attention being paid to diet, etc. Mr. Daniel Hanbury, in the *London Pharmaceutical Journal*, describes what he has seen of this wood as consisting "of truncheons of about two feet long, varying from the thickness of a finger to that of a man's arm. The wood is covered with a thick, fibrous, greyish-brown bark, coarsely furrowed longitudinally with deep cracks, and so tough that it may be stripped off in pieces of considerable length. A white pulverulent matter, resembling an efflorescence, occurs between the layers of the liber, from which it escapes as dust when the bark is torn. When one examines a transverse section of a truncheon, one perceives the bark to be of considerable thickness, and to consist of two more or less defined zones—the inner more compact. The wood is of a pale brown, marked with concentric zones, which, however, are too little distinguished from one another to be counted with any certainty. The pith is frequently eccentric; its transverse section sometimes shows a stellate form." He does not know its botanical origin, but believes with Dr. Krog that it may be safely placed in the natural order of the Papilionaceæ. Prof. A. Buchner, of Munich, describes the wood as tasteless, the bark slightly astringent, yielding to the decoction or tincture a sherry brown color, blackened by a persalt of iron, but unaffected by either a solution of gelatine or iodine. Analysis yields nothing important save a large amount of oxalate of lime, in the form of fine powder filling the parenchymous cells. Prof. B. suggests that this may be the source of the medicinal properties of the wood, acting as a preservative to the lungs by combining with oxygen, and yielding carbonic acid and carbonate of lime. This might be tested by therapeutic experiments with the oxalate of lime. Though insoluble in water, the fine particles of the powder readily pass through the strainer with the decoction, and probably cause the dryness in the throat experienced after taking the draught. On the whole the reports from Europe concerning the efficacy of this article are somewhat contradictory, and given only in outline, no details of cases having yet reached us. It is said, however, that a spurious article is already in the market.

NITRIC ACID IN INTERMITTENT FEVER.

The employment of nitric acid in the treatment of intermittent fever is recommended by Prof. W. A. Hammond, in the *Maryland and Virginia Medical Journal*, for February, 1861. He reports a number of cases treated by him at Fort Riley, Kansas Territory, about four years since. Thirty-two were treated with nitric acid, and nine with the sulphate of quinine. Of those cured by nitric acid, three had previously used quinine without effect; and those in which quinine had proved successful nitric acid had been employed without benefit in two, and in one other had to be omitted on account of producing nausea, heartburn, etc. The average period required to permanently arrest the disease was three days with either remedy. The nitric acid was given in doses of ten drops, diluted with water, three times per day, and the quinine in doses of eight grains, three times per day. Since these cases were treated he has frequently employed the nitric acid for the same purpose, and has met with such success that he now seldom resorts to any other treatment in simple uncomplicated intermittent fever; and considers the subject both in view of the successful employment and cheapness of the remedy, as one of sufficient importance to the physicians of malarious districts as to induce them to give the remedy a trial, and report for the information of others the results at which they may arrive.

PENGAWAR-DJAMBI (PALEA CIBOTII.)

This new hæmostatic is derived from the stipes of a fern of Java, and consists of very soft, delicate filaments, flexible, and so light as to float in the air for a long time. They vary in color according to their thickness, from a golden, light brown, to a dark grey or blackish. It is said that six grains form a mass sufficient to arrest bleeding from an artery one line in diameter. It absorbs water so readily as to sink in about half a minute. When subjected to heat it yields an empyreumatic odor, and detonates under combustion. Its styptic effects are supposed to depend upon its capillary attraction overcoming the force by which the water in the blood is held in combination, the immediate consequence of which is the coagulation of the remaining portion of the blood, by which, together with the elasticity of the filaments, now enlarged by the absorption of fluid, a firm adhesion of the coagulum to the surface of the wound takes place, causing a firm closure of the mouths of the bleeding vessels. The advantages claimed for it over other styptics, is, that the effect is quicker, that it produces a coagulum where other agents have failed, as in carcinomatous or scorbutic ulcers, and that it does not retard the healing process. When used, it should be crumbled, and a sufficient quantity (five grains to a scruple) pressed for a few minutes directly on the bleeding surface, afterwards applying a suitable compress. By this means it is made to penetrate into the finest apertures on the surface of the wound, causing instant coagulation of the blood oozing from the smaller vessels, and said to be reliable in all cases where the divided artery does not exceed a line and a half in diameter. Whether experience will substantiate what authors have told us concerning this much extolled styptic remains with us to be seen.

PROPYLAMINE.

This new remedy, which has recently attracted some attention both in Europe and in this country, as a remedy for acute rheumatism, belongs to the class of alkaloids, with

which the materia medica of the present century so plentifully abounds. It was discovered by Wertheim in 1850, and may be described as a nearly colorless, transparent liquid, with an ammoniacal, and sometimes fishy odor, soluble in water, and has an alkaline reaction. Its composition is C_3H_9N. It forms crystallizable salts, most of which are soluble in water and alcohol,* again decomposed by the addition of potash. It is obtained artificially from narcotina, codeia, and some other sources, or may be extracted from various substances in which it is contained by nature. Among the latter sources, are herring pickle, cod-liver oil, ergot, the flower of crataegus oxyacantha, in the fruits of the sorbus aucuparia, in the chenopodium vulgare, etc. The most fruitful source, or that from which it is most readily obtained, appears to be the herring pickle. The following is Mr. Proctor's formula, published in the *American Journal of Pharmacy*, vol. xxxi. page 127.

"Take any quantity of herring pickle, obtained from dealers in salt fish; this is put in a retort, or tight still, with sufficient potash to render the liquid strongly alkaline, and the liquid heated. A well refrigerated receiver, containing some distilled water, being attached, heat is applied as long as the distillate has the odor of herrings. This is then saturated with hydrochloric acid, evaporated carefully to dryness, and the dry crystalline mass exhausted with absolute alcohol, which dissolves the propyl salt and leaves the muriate of ammonia. From the former the pure propylamine may be obtained in solution by means of hydrate of lime, using strong precautions to refrigerate and condense the vapors which are actively disengaged almost without heating." The next reliable source of propylamine is cod-liver oil, in which it is said to occupy the place that glycerine does in some other oils. In a review of the progress of materia medica for the last ten years, read before the Maine Medical Association, by H. T. Cummings, M.D., of Portland, and published in the Boston *Medical and Surgical Journal*, July 25, 1861, the writer gives some attention to this matter, and concludes with apparently good reason, that if propylamine possesses the efficiency claimed for it in the treatment of rheumatism, to it is due in a great part the reputation cod-liver oil has hitherto held in similar affections. Dr. Awenarius, of St. Petersburg, is the first who has used this substance in medicine. He is said to have treated 250 patients in hospital, between March 1854 and June 1856, besides having used it to some extent in private practice, and he affirms that pain and fever had in every case disappeared the day after the administration of the medicine. It has been used to some extent in this country, especially in the neighborhood of Philadelphia.

Dr. R. H. Stabler writes to the *American Journal of Pharmacy*, giving some account of his experience in the employment of this remedy. He thinks its great value is best demonstrated in acute rheumatism of young subjects, where the disease, unless controlled, is liable to attack the heart. He found in these cases relief to follow in from twenty-four to thirty-six hours. In chronic cases it requires a somewhat longer time. It is usually given in water, the dose for an adult being from two to three drops every two hours. Some prefer it in form of a chloride, others in form of an iodide. For information concerning the latter combination, the reader is referred to the first volume of the Medical Times, page 205. Dr. Awenarius administered it as follows: Propylamine gtt. xx., distilled water ℥ vj., and if necessary, Oleosaccharum of Menth. Piper. ʒ ij. Dose, a teaspoonful *every other hour.*

Infant Mortality in Ireland.—Despite legislative enactments favoring the poorer classes, notwithstanding the absence of famine or pestilence, the population of Ireland has decreased by 787,842 souls, which amounts to a proportion of 12·02 per cent. in the decade of years. *Lancet.*

* The sulphate is not soluble in alcohol.

Reports of Hospitals.

NURSERY AND CHILD'S HOSPITAL.

TWO FATAL CASES OF MEASLES.

[Reported by J. Lewis Smith, M.D., Curator.]

During the present year, nearly every form of the contagious disease of childhood has been treated in this institution. Measles, scarlet fever, whooping-cough, and varicella have successively appeared among the children, but through the rigid system of "quarantining," the three first were arrested, without materially increasing the number of deaths. Varicella, which appeared last, and cases of which have not been isolated, is still prevailing. The following fatal cases of measles present some features of interest. The histories were prepared from the notes of the house physician, Dr. Alexander Hadden.

Case I.—March 16, 1861. A. B., æt. 10 months, was admitted to-day from the Nursery into the Hospital, under the care of Dr. Swift. The eruption of measles has just appeared over the body, and the symptoms are favorable. 19th. Doing well; eruption fading slightly. 20th. The eruption receded to-day, and convulsions occurred, ending in death in a few hours.

Sectio Cadaveris.—Brain somewhat congested, but otherwise healthy; the posterior portion of the lower lobe of each lung, dark red, feebly crepitant, and more solid than in the natural state. Under the microscope, this part of the lung was found to contain an unusual proportion of blood discs. No other pathological appearance was observed in the lungs or elsewhere, except the usual bronchial affection, but the abdominal viscera were not closely inspected. The above history is interesting, as showing the condition of the viscera in a case of sudden recession of the rubeolar eruption. It was one of congestion of the brain and lungs, but mainly of the latter. Perhaps the pulmonary congestion was the first stage of pneumonia, and was the cause, rather than the effect, of the recession.

Case II.—March 8, 1861. J. McE., æt. 2¼ years, is admitted to-day, from the Nursery into the Hospital, with the eruption of measles over the whole body. He had the usual premonitory symptoms for several days before the appearance of the rash, and is suspected to have incipient hip disease. The constitutional symptoms to-day are slight. 11th. Is very much worse; pulse weak, and numbering 164; the eruption hemorrhagic; sordes on teeth and gums; respiration accelerated; is inclined to sleep; evacuations frequent, dark, and offensive; ℞. Quin. Sulph. gr. ¼, every three hours, beef tea, wine whey, etc. 12th. Mucous râles on both sides of chest, and moderate dulness on percussion in each infra-scapular region. Continue treatment. 16th. Symptoms somewhat better. The stimulants have been gradually withdrawn, but nutritious drinks are continued. 26th. Is becoming progressively emaciated since the last record, and the symptoms are much worse. From the great emaciation, and protracted cough, phthisis is suspected. 28th. Died to-day of exhaustion.

Sectio Cadaveris.—36 hours after death; great emaciation; rigor mortis; the anterior aspect of the lungs is healthy, but the entire lower lobe, and the inferior half of the upper lobe on the left side, the posterior half of the upper and lower lobes, and a little of the middle lobe on the right side, are dark red, non-crepitant, and not susceptible of inflation, unless by great force of the breath. On making an incision into these portions, the cut surface is found of a lighter color, in places, than the hepatized lung usually is, as if about passing into the stage of "purulent infiltration," but in all parts the lung is firm. The diseased portions are adherent to each other, by fibrinous exudation, and the pleura is more or less opaque from the same cause; liver enlarged and very fatty, the oil globules being mostly free; very few hepatic cells are observed; stomach and upper

part of small intestines healthy; mucous membrane of the lower portion of the small intestines, and of the colon, vascular and thickened, and over a considerable portion of the latter is a delicate layer of fibrin; mesenteric glands slightly enlarged; thoracic and abdominal organs otherwise healthy; brain not examined.

Remarks.—The points of interest in this case are the following:

1st. The great emaciation, and obstinacy of the pulmonary disease, in a scrofulous patient, without tubercular deposition. This case, and many others treated in this institution, prove that secondary pneumonia, though occurring in the most unfavorable cachectic condition, does not, in general, become complicated with tubercles, and is not, therefore, in its nature, incurable. This fact has been frequently verified by the autopsies made in those cases of pneumonia, so often developed in the emaciated and asthenic state, produced by the summer complaints, but exceptions are not infrequent.

2d. The grey appearance of the solidified lung "Purulent infiltration" of the lung is rarely met with, at the post-mortem examinations of infants and young children in the Hospital. The lung solidified by inflammation, whether primary or secondary, has, with a few exceptions, been of a dark red hue; and in protracted cases, instead of becoming of a grey color, as in the adult, small abscesses form, containing the *débris* of the lung, mixed with pus cells, while around these abscesses the pulmonary tissue preserves the appearance of the second stage of pneumonia. On this account, the grey appearance of the solidified lung in this case was interesting. The light color was found, however, by the microscope, to be due, not to pus cells, but to the large number of oil globules, some free, but most of them collected in groups ("compound granular cells"), or contained in the cylindrical or pavement epithelial cells. Pus cells, if any were present, were certainly not in sufficient quantity to produce the light color. Oil globules usually appear in a lung whose function is arrested by congestion or inflammation, but so abundant a production of fat in the lung is remarkable.

3d. The latency of the colitis, and the deposit of fibrin on the mucous surface of the colon, instead of in the larynx, as is common after measles.

Reports of Societies.

SURGICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, *November* 22, 1861.

DR. JAMES R. WOOD, Chairman.

DISCUSSION OF DR. GEO. K. SMITH'S PAPER ON THE RELATION OF THE INSERTION OF THE CAPSULE OF THE HIP-JOINT TO INTRA-CAPSULAR FRACTURE.

PROF. ALDEN MARCH of Albany (who was present by invitation), being requested to give his views upon the points before the meeting, remarked that, so far as the question related to the varying points of attachment of the capsule to the os femoris, Dr. Smith's simple and ingenious mode of measurement set the matter at rest. He believed that we should find a difference in the point of attachment at the posterior part of the neck of the bones in the normal and abnormal specimens. He agreed with Dr. Smith, that in all cases of *intra-capsular* fracture, the neck, whether more or less attached to the head or shaft of the bone, was almost or entirely absorbed, before any effort at reunion took place, either by ligamentous or bony material. And, futhermore, that as absorption progressed, when it began to encroach upon the attachment of the capsule in its natural site, the attachment gradually receded, or was carried outwards, so as either to approach closely to, or be transplanted into the posterior inter-trochanteric line. This view of the subject, he stated, was supported by the analogy which existed between the pathological conditions of the capsule in those cases, and in those of morbus coxarius. In the latter disease, as the destructive process goes on, the capsule will be carried back upon the face of the bone, to correspond with the enlargement of the acetabulum. He then exhibited several specimens of hip disease, with the capsular ligament thus abnormally attached, which fully illustrated the point referred to. Three specimens of his own, of intra-capsular fracture of the cervix femoris, were next exhibited; the first, to show the rapid absorption of the neck, without any effort at union; the second, absorption of the entire neck and ligamentous union at a later period; and the third, to illustrate nearly the same amount of absorption as in the other cases, but with *bony union.* The first specimen of fracture was from a white-washer, who fell from a ladder and injured himself in the hip. He was taken to the almshouse, where he died in the course of a few weeks. Dr. March saw the case at the time of the accident, and called it a fracture of the neck of the femur. On making the post-mortem examination, he found, to his surprise, that the neck of the bone had completely disappeared, as if it had been cut out. There was, however, no ligamentous or other attachment of the head to the shaft of the bone.

The second specimen was recently obtained from an almshouse subject, who, in January, 1860, while engaged in sport with other inmates of the institution, was merely thrown upon the injured hip. The attending physician, Dr. Boulevare (who reported the case to Dr. March), diagnosticated the injury to be, fracture within the capsular ligament. It was treated by placing the fractured limb upon a pillow, and confining the patient on his back for several weeks. In the course of a few months, he could get about pretty comfortably by holding on to chairs, tables, etc., with his hands. On the 28th of August, 1861, nearly twenty months after he received the injury, he died from an attack of dysentery.

In the third specimen of intra-capsular fractures (in which there appeared to be bony union), there was more of the neck attached to the shaft at the anterior face of the bone, than in either of the other specimens, though posteriorly, the relation of the head and shaft appeared nearly the same. No history of this specimen could be obtained; it was purchased abroad some years since with other pathological specimens for the museum of the Albany Medical College.

A fourth specimen, which he claimed to be an intra-capsular fracture, was also shown. It occurred in a boy ten or twelve years of age, who, from the date of the accident, was always lame. He died at the advanced age of sixty-two years. The history of the case could not be procured, since the attending surgeon died some thirty or thirty-five years before the patient. The non-professional testimony was abundant; and strongly in favor of the nature of the accident assumed. In this case, the line of the fracture on the anterior face of the neck, and in fact on the posterior face, corresponded in a remarkable manner with the last specimen exhibited. The upper part of the thigh bone of the same subject, from the opposite side, was exhibited, and found to be nearly in a normal condition, with the exception of a slight change in the form of the head of the bone, which must have taken place at an advanced period of life, from chronic arthritic inflammation.

He next exhibited several specimens of extra-capsular fracture of the neck and trochanter, some of which were beautiful examples of that variety called impacted fracture. But one specimen seemed to be peculiar in these particulars; there was little or no distension; no *shortening*, no *inversion*, and but the slightest amount of *eversion*; without doubt, no crepitus could have been detected at the time of the accident, and hence a direct diagnosis would have been almost impossible. He remarked, that it was curious to observe, that in those specimens (and he thought it would be found true in all other extra-capsular fractures,

whether impacted or not), there was no absorption or shortening of the neck. Whereas there was great shortening, and in most instances almost entire absorption of the neck of the bone, when the fracture was within the capsule; while the contrary was the case when the fracture was without the capsule. This being the case, would not the post-mortem condition of the part furnish complete and satisfactory evidence of the nature and situation of the fracture during life?

Dr. March suggested to all present, to apply the test of injecting plaster of Paris in all those cases of *suspected intra-capsular* factures, where death occurred at a period remote from the receipt of the injury, that we might ascertain as conclusively in the pathological, as Dr. Smith had done in the anatomical specimen, the precise extent of the attachment of the capsule on the posterior face of the neck of the bone. He also suggested, as a subject worthy of study, and needing explanation, why it is, that the bony material of the neck of the femur was so freely and so rapidly absorbed in intra-capsular fracture; and by what means it was accomplished, while the same effect does not follow in other fractures.

Assuming as he did, that in most cases of intra-capsular fracture of the neck of the femur, the fracture took place near or close to the head of the bone, and that *all* of the neck on that portion connected with the shaft was absorbed; and that the capsule *recedes*, as the destructive process goes on, so as to be found in due time attached posteriorly near, or upon the posterior inter-trochanteric line, as has been shown in the specimens exhibited by Dr. Smith; he believed that one of the difficulties in deciding whether a certain fracture was entirely within the capsule, was satisfactorily removed. This discussion was calculated to bring two points prominently before the medical public, viz. the *rapid absorption* of the neck of the bone, in intra-capsular fractures; and the abnormal connexion of the posterior portion of the coxo-femoral capsule.

The specimen of Dr. Holmes, to which Dr. Smith had referred, was submitted to the examination of the Medical Society of the State of New York, at its session of 1860. Dr. March was of opinion that it was a genuine case of complete intra-capsular fracture, with bony union. But as some of the members of the Society seemed to doubt the correctness of this opinion, a committee, consisting of Dr. Brinsmade, of Troy, Dr. Parker, of Poughkeepsie, and the speaker, was appointed, to whom the subject was referred for a critical and thorough examination, both by maceration and the microscope. But the committee never obtained possession of the bone, and reported accordingly at the session of 1861, with the request (suggested by Dr. Holmes) that it be continued, which was done. But up to this time, the committee have neither received the specimen, nor heard from its possessor.

The Doctor, in conclusion, took occasion to say something about morbus coxarius. He presented several specimens of necrosis of the head of the bone detached from the neck; one from the living subject, from whom it worked out spontaneously, and the patient recovered; and another which had been found in a post-mortem specimen. In a third specimen, about one third of the head of the bone was found dead, but not entirely cast off. A fourth specimen was exhibited, in which an exfoliation of the head of the bone, somewhat larger than the thumb nail, was cast off, and extracted through an incision made into the joint at an early period of the disease. This patient also recovered. These specimens, he thought, would go to prove the correctness of his views presented to the medical public in a published paper of the *Transactions of the American Medical Association* for the year 1853, on the Pathology of Hip Diseases, and the mechanical means suggested to prevent progressive absorption. They will, he said, especially help to prove the efficacy of the treatment of my friend Dr. Sayer, who not only uses extension and counter-extension to relieve the inflamed and tender parts from pressure, but advocates cutting freely into the hip-joint under certain circumstances. If nature feels the necessity and adopts the means, painful and tedious though they be, to separate the dead head from the shaft of the bone, Dr. Sayre can do it much more speedily and effectually with his knife. The effort, he said, that was made a few years ago, to bring into disrepute the mechanical treatment of hip disease (as suggested by himself), and to recommend exercise, and motion of the joint, in all stages of the disease, and to rely upon constitutional remedies, seems about as preposterous as would be the treatment of a broken leg without any dressings or means of support, and directing that the individual thus affected should move about and take free out-door exercise.

Progress of Medical Science.

PREPARED BY P. F. C. DESLANDES, M.D.

Cramps accompanying Cholera, treated by the Metallic Armatures (Metallic Apparatus.)—*Translated from the Gazette des Hôpitaux.*

The excessive heat of the middle of June, and that through which we have just passed since the beginning of August to the last few days, have brought on, as it almost unavoidably happens every year at the same period, a large number of gastro-intestinal affections simulating cholera, and even some well marked cases of cholera. The character of the cholera affections now reigning is in fact a prompt reaction, most usually without any consecutive symptoms, and without any other sequence but an extreme lassitude and prostration, from which the patients are long to recover. It has nevertheless seemed useful to us to take this opportunity of calling the attention of our readers to a very simple means of combating the cramp and spasms so painful which accompany the evacuations of cholera; we mean the application of the metallic *armatures* of Dr. Bury. The following is what this ingenious physician wrote to us a few weeks ago:

"A few days ago, my dear doctor, you had the kindness of ascending with me the 160 steps which lead from the peristyle to the upper floor of the Hotel Dieu, and there, in one of the rooms of Mr. Harteloup, who had done me the honor of calling me to see two of his patients laboring under nervous affections, you have seen metallotherapy represented by a simple copper basin, borrowed from the attending nurse, and two *bands* of metal obtained from Mr. Trousseau's clinic, stop in a few seconds a violent attack of hysteria; and you remember, I have no doubt, that whenever you wished it, I always could in as short a time, alternately suppress or bring back a new attack by removing or reapplying the metal, to follow in the same way, according to your indications, every spasmodic or neuralgic phenomenon which had appeared elsewhere than under the surfaces covered, and finally, once convinced, as if you would rather have it so, your curiosity been satisfied, keep the patient until the end of the attack in the most perfect calm. The experiment lasted, if I remember well, about half an hour, and you had all the time necessary to ascertain that the cold of the metal had nothing to do with this, for after the first ten minutes it was already warm and at the temperature of the patient's body.

"Well, my dear doctor, what you have seen a few days ago, what so many others have seen me do for twelve years since metallotherapy was discovered, I have done it a hundred times in 1849, publicly in the hospitals, and that often in the presence of witnesses like Messrs. Rostan and Bouchut, Michel Lévi, Monat, &c.

"I will speak first of a cholera patient on whom I experimented in Mr. Monat's wards. I pass over the details to come to the point in question.

"G. presented about three o'clock in the afternoon all the symptoms of well marked Asiatic cholera; he had excruciating cramps in the lower limbs. At seven o'clock in the

evening the treatment had as yet brought no relief. I applied a copper ring on each leg on a level with the affected muscles. The cramps ceased immediately. At the end of half an hour of perfect calm, I tried to remove the rings, but the nervous phenomena so soon reappeared that the patient entreated me to have them replaced. I had no sooner acceded to his request when calm returned. A little later in the night, the arms were also taken with most violent muscular convulsions. The patient then seized one of the rings he wore on his legs, and used it for several hours in pursuing the cramps wherever they appeared. This time again the metal was effectual, and it is worthy of remark that the right arm, whose hand held the ring, was affected only when fatigue obliged the patient to hold the metal in the opposite hand.

"We are now at the Val-de-Grâce. On the 14th of April, the day of my first visit to this hospital, I was taken to a patient attacked with cholera three hours before. This man, in the most dangerous condition, feels all over his body such violent cramps that he disturbs all the inmates of the ward by his incessant agitation and rending cries. At the invitation of Professor Lévi, I applied in his presence a complete *armature* of iron wire, all the pieces of which, ten in number, had been previously warmed. In less than two or three minutes after, the patient had become quite calm. I tried to remove the bracelets from the right arm, and almost immediately the cramps returned in that limb, and in that only. I reapplied them, and they disappeared anew. About half an hour after, Mr. Lévi questioned the patient, who told him that he no longer suffered anywhere except a little in the right side. The perfect tranquillity and expression of his face witnessed besides to his sincerity. However, M. Michel Lévi and the assistants were not yet convinced, there might be coincidence. I then removed the whole apparatus, when the cramps reappeared as bad as ever. I replaced it, and they ceased entirely. I offered to renew the experiment, but it was thought useless, and M. Lévi went away, leaving to his assistants, Drs. Masselot and Krug, the care of continuing the observation. These gentlemen remained with me about three quarters of an hour by the patient, and during all that time there was a complete calm—decubitus dorsal, only one vomiting. At twelve o'clock I withdrew, carrying with me the *armature*, which I thought henceforth useless; but hardly was I out of the hospital than already the cries and the agitation had returned as in the beginning. An hour after two nurses were required to prevent the man from getting out of bed. The experiment was decisive. Therefore, from that day, metalliotherapy was admitted to experiment night and day in the wards of the Val-de-Grâce. What it did there has been reported by Drs. Masselot and Krug in the *Echo du Val-de-Grâce.*

"The results which I have obtained in 1849 with my *armatures*, and those obtained during the epidemic of 1854, have also been obtained by others sometimes with the same apparatus, sometimes with simple copper bands, iron wire, or any other metal formed of an alloy of copper. Among the latter I may particularly mention Drs. Defaucamberge and Durand, who having been sent on a mission in 1849 to the Department of the Haute-Marne, rendered, by their success, the copper applications so popular that at Biesles, Nogent, Mandres, etc., whenever a case of cholera existed in a family an armature of argental was immediately fabricated; the inhabitants of these villages, almost all cutlers, having the argental in abundance (this metal is an alloy of copper, zinc, tin, and nickel), and applied it without waiting for the arrival of a physician. Dr. Campardon told me a year ago, that the previous summer, at Montmartre, in a violent case of sporadic cholera, he had also improvised with no less success, a similar apparatus with iron wire bought at the nearest hardware store. The same object may be attained at less expense. During the epidemic of 1849, M. A. Richard obtained the same results on two cholera patients of the *rue des portes* by means of apparatus which are everywhere at hand, by means of simple copper kinchen utensils."

We have ourselves just had an opportunity of trying the simple means so vaunted by our *confrère*. We have just been called to see a young man, seventeen or eighteen years old, of a strong constitution, laboring under a serious attack of cholera: vomiting, whitish stools, præcordial anxiety, extremely painful cramps, cold skin, cyanosis of the face and extremities, weakness of voice, &c. After inducing reaction, and moderating the evacuations, I had to attend to the cramps to which this young man was a prey, and which were most violent. Twice he had been a little relieved by frictions with the opium and camphor liniment used in such cases; but these moments of calm were very short, and the cramps returned as strong as ever. I was at a distiller where metallic utensils were numerous.

I had placed under the legs of the patient a large copper covercle on which the two calves, which were the principal seat of the cramps, rested In a few moments, and in my presence, the cramps began to decrease, then ceased completely. I had ordered to leave the covercle in place at least half an hour. At the end of this time the cramps had not reappeared, and it was removed. Since then the patient has not felt anything, and has quickly recovered.

American Medical Times.

SATURDAY, DECEMBER 21, 1861.

PROPOSED REFORMS IN THE MEDICAL DEPARTMENT OF THE U. S. ARMY.

Bills have been introduced into both Houses of Congress designed to re-organize the Medical Department of the Army. We have as yet seen but the outline of the Senate Bill, which provides for the appointment of the following officers:—

"Director-General, with rank of Brigadier-General, who shall be chief of the medical corps, and perform the present Surgeon-General's duties.

"Sanitary Inspector-General, with rank of Colonel of Cavalry, who, under the Director-General, shall have general supervision of all that pertains to the sanitary condition of the army.

"Six Sanitary Inspectors, with the rank of lieutenant-colonel of cavalry, who shall inspect the sanitary condition of the troops, and report to the Sanitary Inspector-General.

"Surgeons of first class, with rank of major of cavalry, for staff, hospital, and bureau duties.

"Fifty surgeons second class, with rank of captain of cavalry, to be assigned to duty with regiments.

"Assistant surgeons, not exceeding seventy, with rank of first lieutenant of cavalry, with duties of assistant surgeons.

"Not exceeding seventy-five medical cadets, not less than eighteen nor more than twenty-three years old at their entry, to be examined by a medical board. After three years' continuous service they may be examined for promotion to the rank of the highest class of non-commissioned officers.

"As many Hospital Stewards as the service requires, designated by a Sanitary Inspector, on the recommendation of the Senior Surgeon of the post, division, or regiment, with rank of First Sergeants of Cavalry.

"Sections 2, 3, 4, 5, and 6, provide for selection by the President, from the whole Army Medical corps, of suitable persons to fill the places of Director-General, Sanitary Inspector-General, and Sanitary Inspectors, none of whom are to be over sixty years of age. Other officers are to

be appointed and promoted by seniority. Vacancies are to be filled from civil life or from Brigade Surgeons of volunteers, after due examination, who are not to be over thirty-five years of age.

"Section 5 repeals the allowance of extra rations to Surgeons, upon the completion of ten years' service.

"Section 7 provides for the retirement of every medical officer sixty-five years old.

"Section 8 repeals all inconsistent laws."

From this outline of Senator Wilson's bill, it would appear that it is designed to accomplish the following highly important improvements in the administration of the Medical Department of the Army:—

1. The introduction of an efficient corps of medical officers, specially devoted to sanitary inspection and hygienic administration.

2. The selection and appointment of the Chief of the Medical Bureau—the Director-General—as well as all the Sanitary Corps, solely with reference to *fitness*.

3. The establishment of a rule for the honorable retirement of every medical officer, at a specified age of presumed inability.

4. The recognition of at least one degree of higher rank in the medical Staff.

5. A better definition of the various ranks in the Medical Staff, and a systematic assignment of general departments of labor to each rank or class of surgeons.

6. An increase of the class of Medical Cadets, and a proper recognition of their status and privileges in the Medical Staff of the Army.

These objects appear to be eminently desirable, and they may unquestionably be attained without serious disturbance of the Medical Staff as at present constituted. Indeed, there is reason to believe that the leading provisions of Senator Wilson's bill will be cordially approved by the best members of the staff, and by the profession generally. Military Surgeons have for years been endeavoring to procure for their department of the military system, such improvements in its organization and status, as would be commensurate with the demands of the service and with the dignity and claims of the medical profession. But year after year, the humble suggestions and efforts that have been made by the Medical Bureau and Staff for the attainment of these objects, have been coldly negatived and laid upon the shelf by the military committees in Congress. For many years, every effort for the improvement of military medical service has been strangled by some congressional committee, and usually with no better apology than the disingenuous plea of economy, though no ideas of sordid gain had animated the efforts of the staff, and none but advantageous results to the national treasury would have resulted from the proposed reforms. In view of these facts, and the obvious need of enlarged and better arrangements for meeting the demands upon the Medical Bureau in time of war, there can be but one opinion respecting the duty of forwarding the objects of this bill. Of its details and the precise bearings of all its provisions we cannot judge intelligently until we have seen the complete draft of the act; but there are considerations connected with this important measure and with the duties, results, and rewards of medical service in the army, in which the entire profession should have and express deep interest; for in no other department of medical life are the results of the physician's and chirurgeon's skill and the improvements of the healing art so conspicuously held up to public view, and in no other field of medical service are the opportunities so ample and inviting for adding to the treasures of hygienic and surgical knowledge. And now, in the midst of a war that has suddenly called to the tented field more than half a million of noble men from loyal states, and nearly as many from the revolted territory, greater responsibilities, a greater work, and larger facilities for surgical and hygienic inquiry and progress, are presented to our military surgeons than ever before were afforded in the history of armies. Let nothing prevent our profession from being at once and fully prepared for its responsibilities in this vast field.

The total number of medical officers now serving in the Federal forces—regular and volunteer—fully equals the entire body of medical men in the staff and regimental service of the British army. The claims and the duties of the American are certainly in no respect inferior to those of the British Medical Staff. It is therefore reasonable to inquire if the proposed modification of the laws affecting the Medical Bureau of our army will give to it all the advantages that have been accorded to the medical service of the British army under the recent reforms effected through the intelligent agency of the Hon. SIDNEY HERBERT, and the present Director-General, MR. ALEXANDER. The medical system of the British army affords a better and more practicable standard of comparison for us than that of France, because, until very recently the educational basis of admission to the British medical service was quite similar to our own; while France has for a long period kept up at *Val-de-Grâce* a grand educational institution of military medicine, and thereby given origin to a more elaborate and classified system in the division of labor, and the gradations of rank and promotion in the service.

One thousand and seventy-five medical officers on full pay at present perform the duties of the British army medical department. These consist of:—

1 Director-General.

8 Inspectors-General of Hospitals.

32 Deputy Inspectors-General of Hospitals.

345 Staff and Regimental Surgeons (66 of whom are Surgeons-Major, having served twenty years).

684 Staff and Regimental Assistant Surgeons.

5 Apothecaries and Dispensers.

The Assistant Surgeon must do five years' active service before being promoted to the rank of Surgeon, though for distinguished services and excellence he may be promoted out of the regular course, the reasons therefor being duly "gazetted." The Surgeon may be promoted to Deputy Inspector of Hospitals only after ten years' active service, except in cases of special "ability and merit," when the promotion may be ordered by the Crown. For promotion to the office of Inspector-General, the Deputy must have served five years at home and three abroad. But in regard to all regular promotions, it has recently been ordered that in emergency or whenever the good of the service requires it, the Secretary of State for War may shorten the several periods of service.

The Director-General and both classes of Inspectors are administrative officers, and by the law of 1859 they must retire from the service on attaining the age of sixty-five years. Surgeons-Major, Surgeons, and Assistant-Surgeons, are regarded as having executive professional functions, and with a view to maintain the efficiency of the service "they must be placed on the retired list when they shall have attained the age of fifty-five years."

The reforms in the British system in the year 1859, gave increased rank to the higher classes of Surgeons. The rank of Major-General is accorded to those Inspectors who have served in that class three years; Brigadier-General is accorded to the Inspectors during their first three years' service; and to the Deputy-Inspectors is given the rank of Lieutenant-Colonel, and after five years' service in his class the rank of Colonel is accorded. The rank of the junior medical officers is similar to that in our own army, but the Surgeon after having spent twenty years in the service becomes Surgeon-Major, with the rank of Lieutenant-Colonel.

The Queen has ordered that the "medical officers shall be held entitled to the same honors as other officers of equal relative rank" in her army. "Good Service Pensions" are awarded to the most meritorious officers, and twelve officers of such merit are to be named as Her Majesty's Honorary Physicians and Surgeons.

The foregoing summary affords the idea we designed to present to illustrate the great improvement that has recently been wrought in the medical department of the British army. And, inasmuch as all the essential improvements effected in the British system are greatly needed and may at once be wrought in our own army, we would invite attention to some of the practical results already effected in the British army by these improvements.

First.—The better division and system of the administrative and bureau duties of the medical department have at once brought order out of confusion, and given a high degree of utility to the statistical records and the professional observations, experience, and reports of the army surgeons.

Second.—The Bureau at London having organized a Sanitary Branch, with Dr. T. G. Balfour as its Inspector-General, great interest has been awakened throughout the army in reference to the causes and the prevention of disease.

Third.—The Statistical Branch of the Bureau is rapidly deve'oping the sound logic of numerical results in connexion with medical and hygienic observations in the army.

Fourth.—The medical officers find that their power of usefulness as well as their personal enjoyment of military life is vastly augmented by the increased respect that is accorded to themselves and their official suggestions and orders.

Fifth.—The statistical, sanitary, and medical reports of the department present unequivocal testimony to the increased efficiency of the medical service in the saving of life and the prevention of disease in the army.

For our American army, with its rank and file made up of noble citizens, and its medical staff embodying the best talent of the medical profession, we would hope for results not less important to humanity and to medical knowledge than those already experienced or foreshadowed under the reforms in the Medical Department of the British army. To accomplish such results it is necessary that both the merits and defects of the existing system of administration in our Army Medical Department be properly appreciated, and that whatever is good and sufficient in that system should be carefully preserved and strengthened. Revolutionary and violent changes are not called for; on the contrary, the existing system only needs to be expanded and strengthened, and have its facilities and powers for usefulness in the departments of hygienic and medical inquiry and improvement, statistical records, official inspection, and professional education, made fully adequate to the humane and scientific responsibilities and requirements of the service. All this can be attained without disturbing the harmony and efficiency of the Staff as at present constituted. And in order to insure the most intelligent basis of action, and the greatest breadth and harmony of views in reference to the reforms proposed and required, we would suggest that the Congressional Committees that have this subject in charge should invoke the counsels of the most competent and noble members of the Staff, and such members of the Sanitary Commission as have given most attention to military medicine. It was by the lucid testimony and counsel of Surgeon Alexander, Dr. Mapleton, and Dr. Balfour, of the staff, and Dr. Sutherland and Florence Nightingale, as Sanitarians, that the royal decision was obtained for the improvement of the British medical service. Such high-minded surgeons of the staff as Dr. R. C. Wood, Satterlee, Cuyler, and Hammond, in council with the medical members of the Sanitary Commission, and the Military Committees of Congress, could not fail to agree upon the best measures for attaining such improvements as are required for the highest efficiency and usefulness of the Army Medical Department. There certainly are some medical improvements needed, but of them we may speak hereafter. The Act of Congress by which they shall be authorized need not be burdened with clauses to specify them in detail. The duty of developing and giving effect to the needed improvements in their particular application will naturally devolve upon the most enlarged and competent minds that grace the staff. But there should be no unnecessary delay in maturing the organic law by which those improvements will be procured.

Whatever is attempted for the modification of the existing system, should be done in accordance with the counsels of those who fully appreciate the merits and defects of that system, and who would consent to no injustice to the senior members of the staff. Our rational convictions and observations are decidedly in favor of the principle of selection and promotion for merit, and honorable retirement on the attainment of an age of physical disability. But we confess to a serious doubt whether the duty of selection for merit can safely or honorably be committed to any other than a medical council. In view of this and many other important professional and public interests involved in the proposed changes, and with much respect for a system whose humane ministrations and rigid exclusion of medical abuses have made the name of American Military Surgeons everywhere honored these forty years, we would ask in behalf of our brethren of the army staff, and in the name of the profession, that the contemplated changes be worthy the noble spirit of that staff, and in every way commensurate with the progress of medicine and the demands of humanity.

THE WEEK.

It is truly gratifying to see with what unanimity the loyal women of the country pour into the depots of the Sanitary Commissions their offerings for the soldiers. Every village and neighborhood should have its organization upon the following basis proposed by the commission:—

"1. Let the first woman whose heart is stirred with yearnings to do something in her own town, go to two or three of her neighbors and take counsel.

"2. Let them agree on some convenient day and hour for a meeting of ladies, in the lecture-room of some place of worship, or in the town-house, or school-house.

"3. Let notices of this be written, and carried to the pastors of all the churches in town, with a request that they be read, with comments by the pastor, in each society, at the close of service.

"4. Let the ladies meet—select a President and Secretary; then let such portions of this pamphlet be read by the President as will serve to explain the nature and working of this Society.

"5. Then let the ladies present form themselves into a Soldiers' Relief Circle, to meet once a week from 1 to 4 P.M —the time to be spent in sewing or knitting for the soldier.

"6. Let them, in addition to the President and Secretary already elected, choose a Treasurer and two committees—one on supplies and work, of three ladies, and one on correspondence, forwarding, and all other business, such as storing, engaging rooms, etc., of the same number."

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The *Lancet* has the following suggestions upon "Kleptomania," a form of insanity remarkably prevalent in this country:—

"It is known to those who have the best means of obtaining information, that this itch for appropriation exists to an alarming extent, even amongst what is known as good society. Thus the London shopkeeper who deals largely in 'portable property' of a very valuable kind has often to keep a private Argus constantly on the watch to gently suggest that the Comtesse de l'Arceny must really restore that lace'et which accidentally got into her ladyship's muff, or to inquire whether the bill shall be sent in for that bit of old lace slipped into her pocket in a fit of abstraction. Of course, if arrested, it would be proved that she had been in the habit of inflicting great grief on her family by the frequent recurrence of similar playful tricks—was, in fact, a kleptomaniac, and therefore to be let off; whereas when the inspector proves a dozen previous convictions against Mrs. William Sykes for shop-lifting, it is considered to show that she is an incorrigibly bad lot, and deserves a proportionally increased punishment. Of course, the old argument would in the former case be urged, that the kleptomaniac is under an irresistible influence inducing the appropriation, with full knowledge of the risk and disgrace incurred if detected. This is simply untrue; for if the desire *were* uncontrollable and the dictates of reason disregarded, articles would be taken in full sight of the owners, and not, as is always the case, craftily purloined in the belief that the theft is unobserved. The ordinary defence as to the crime being evidently without motive is as much opposed to law as the previous argument is to logic. For English law does not trouble itself in cases of larceny with the motive, believing that when the offence is committed, the motive *va sans dire*. Thus Blackstone defines theft to be the felonious taking and carrying away of the personal goods of another, and drily remarks that the offence commenced 'at the time that the laws of *meum* and *tuum* were established, whenever that was.' And we doubt whether the most credulous of these exculpating latitudinarians would consider Bardolph as a kleptomaniac, though his crime was sufficiently motiveless when he 'stole a lute case, bore it twelve leagues, and sold it for three half-pence,' and was eventually hanged for only filching a 'pax of low price.'"

—

One of the lasting evils of war is the large number of maimed persons that are thrown upon the charities of the country. Government gives to such persons, it is true, a pension which, if properly husbanded, is capable of relieving the individual from pressing want. We would suggest the propriety of supplying such persons, as far as possible, with artificial limbs, under proper surveillance, and withholding a monied pension, at least of any considerable amount. Mechanical surgery would be capable of rendering many an idle pensioner capable of self-support. This would be economy in Government, and might give to society many an active and useful member who would be otherwise a burden upon the public.

—

Professor Hamilton commenced his course of lectures on Military Surgery at the Bellevue Hospital Medical College, on Wednesday last. This is the only school in the United States which has a special chair of Military Surgery. An excellent opportunity is offered to those who are intending to enter the army, to learn the practical duties of the army Surgeon, from one who has great practical experience.

—

If there is one class of servants which more than another deserves commiseration, it is that whose duty is to carry, rock, and toss the ever-restless nurslings of the rich. From morning to night, and night to morning, with infinite variations, these gymnastics are performed, until the poor nurse worn out with

Days of toil and nights of waking,

clandestinely administers a soothing syrup, and obtains rest. But "baby tending" is going the way of all manual labor, and we now have announced an apparatus—a "baby tender"—that with tireless activity jogs the infantile generation into good humor. We heartily welcome any contrivance which promises, as does this invention, to relieve nurses of much of their drudgery, and nurslings of the danger of being drugged with narcotics.

Correspondence.

DISEASES AND SANITARY CONDITION OF THE PRISONERS AT FORT WARREN, BOSTON HARBOR.

[To the Editor of the American Medical Times.]

Sir:—Since our arrival at this post the health of the prisoners, held by the United States Government, has materially improved, notwithstanding many obstacles at first had to be overcome. While confined on Governor's Island, New York Harbor, the diseases they suffered from most were, measles, typhoid and intermittent fevers, scabies, pneumonia, phthisis, bronchitis, diarrhœa, and dysentery. The pneumonia was sometimes idiopathic, but in a greater proportion of cases it made its appearance during the progress of, or at the commencement of the typhoid symptoms.

The prisoners of war, when first landed, counted nearly seven hundred persons. They were placed in Castle William, which is the round fort, located on an isolated point of the island. The men were poorly clad, with thin clothing, and some of them had already suffered from measles and other affections. The contour, age, and health of these prisoners, with but few exceptions, was far below the general standard of regular soldiers, and their appearance plainly showed they had recently attended very little to ablution and other important laws of nature. The measles spread in the casemates of Castle William from one company to another, until all liable to the contagion fell victims to its pernicious influence. Happily, each and every one thus seized, passed safely through the disease, although many, for a considerable time afterwards, were annoyed by that common sequela, viz. a short, hoarse, and barking cough. In the casemates the men were somewhat overcrowded, but to offset this, they were allowed extensive limits to ramble,

unrestrained, about, and enjoy the fresh air. Particular attention was paid to keeping the quarters clean; and in order that the air might be as pure as possible, these rooms were regularly ventilated and whitewashed. In the issuing of rations, furnishing cooking utensils, and good beds, the prisoners were placed on the same footing as United States soldiers. Although Surgeon W. J. Sloan used his best endeavors to prevent it, typhoid fever broke out and prevailed to an alarming extent among the prisoners. The sick were sent to three different hospitals, and by judicious management, the disease was finally brought under control and many lives saved. The patients were mostly the worst subjects that could be selected, to undergo the fierce ordeal of this poisonous fever. They consisted of young half developed boys, whose delicate frames indicated that they had never enjoyed robust health. The fever was generally preceded by prodromic symptoms, which were soon followed by a marked chill, and then other symptoms ensued which characterized the disease. The countenance became dusky, the skin was hot and dry, the tongue red at its tips and edges. Epistaxis was a frequent occurrence, and the pulse ranged between 90 and 120. The patients complained of intense pain in the back and limbs, and also of a dull headache. There was, in fact, but a slight variation from ordinary typhoid cases. In but few instances were *taches rouges*, petechiæ, or sudamina noticed, and the glands of Peyer apparently remained intact throughout the course of the fever. The force of the poison was evidently expended on the brain and nervous system, and the consequence was, that the fever left its victim almost a complete wreck in strength and vitality.

In the treatment of these typhoid cases, Dr. Sloan and myself relied upon small doses of calomel, opium, and quinine, given in powder three times a day. Dr. S. had previously found great benefits arise from the use of this combination, in a military hospital during the Mexican war. Our patients were placed in well ventilated rooms, and every attention was paid to cleanliness and faithful nursing. Stimulants and a nourishing diet were employed as adjuvants. Local bleeding, counter-irritation, evaporating lotions, and sponging, were used as they were indicated. In cases of obstinate vomiting, small doses of chloroform were given, and when arrested, the calomel, quinine, and opium was substituted. Out of six hundred and thirty-three prisoners of the line, at least seventy-five were continually under treatment, and of this number the greater proportion labored under typhoid fever. In this seventy-five, I do not include the convalescents, who were very numerous, and were constantly requiring attention. The depressed spirits of our patients, caused by "home sickness," retarded very much their rapid recovery, and often had a tendency to influence a fatal result. Notwithstanding this serious obstacle we met with fair success, for during a period of two months we lost but twenty cases, some of whom died rather from exhaustion than the fever itself.

The order, concentrating from various parts the political and war prisoners at Fort Warren, Boston Harbor, was issued in the latter part of October, and was immediately carried into effect. The order gave me but short notice to obtain a suitable supply of medicines, stores, and bedding, for about sixty patients, who it was thought would be benefited by the change. The Medical Purveyor of New York (Dr. Satterlee, U.S.A.) promptly furnished me a field supply of these articles, and as the fort had been garrisoned by Massachusetts Volunteers, it was supposed the hospital there would be more or less provided. Unfortunately, the volunteers, on evacuating the fort, had carried away or expended most of the supplies, leaving only a sufficient quantity for the use of the mechanics and laborers engaged on the works; therefore, until additional supplies could arrive from New York, there might have been some just cause of complaint. The able and indefatigable surgeon-general of the State of Massachusetts, together with the truly charitable citizens of Boston and the vicinity, offered every assistance and sent comforts to the sick prisoners of war, which tended to alleviate their helpless condition. It would be foreign to my purpose for me to herein mention individual instances of philanthropy and sympathy, extended towards a suffering enemy, as it has been my pleasure to here witness them; therefore, let it suffice for me to say that the sick under my charge fully appreciate this kindness, which to them was unexpected. The voyage on the transport to this place occupied one day and a half, was pleasant, and proved not in the least injurious to the sick. On first arriving at Fort Warren, typhoid fever raged with its accustomed vigor among the men, but it gradually slackened, as they were better provided for in their quarters. The lessening of the number of typhoid cases was followed by the appearance of the mumps, which affected nearly all the men in command, yet in every case it has thus far yielded to a mild treatment of laxatives, fomentations, and diuretics. The diseases most prevalent at Fort Warren are—typhoid fever, mumps, pneumonia, bronchitis, rheumatism, scabies, and debility (the result of previous sickness).

After our arrival here, it was ascertained that several of the twenty-six prisoners, necessarily left in the hospital on Governor's Island, had been attacked with small pox. The knowledge of this fact caused me to thoroughly examine all the prisoners of war to ascertain if they had ever been vaccinated. To my surprise, I found that this important matter had, in the majority of persons examined, been neglected. Having procured through the proper sources sufficient virus, I had the prisoners vaccinated. So long a time of probation has intervened since our departure from Governor's Island and our arrival here, that I feel confident we have miraculously escaped this most loathsome disorder. Although the number of prisoners now held at this fort is far greater than the number confined on Governor's Island, yet sickness has been steadily on the decrease, and its severity is now limited to but a few cases. During a period of six weeks there have been at the fort only four deaths, and one of these occurred among the regular guard of the island.

The greater part of the political prisoners are located in quarters similar to those used by United States officers. They are treated with great humanity, ample room is given them to exercise in, and generally they enjoy excellent health.

Yours etc.,

DEWITT C. PETERS, M.D,
Assist. Surgeon, U.S.A.

Dec. 16, 1861.

Medical News.

TWO DEATHS FROM CHLOROFORM.—*Case* 1.—I was requested by Mr. Field to administer chloroform during an operation for the removal of internal piles by the écraseur. The patient was a large, stout, very muscular man, aged 50; the abdomen was prominent; and the countenance that of a man accustomed to drink, but not indicating any abnormal condition of the heart, or any other organ. There was no arcus senilis, and the pulse and respiration appeared natural. Two measured drachms of chloroform poured on a hollow sponge were first inhaled in the usual gradual manner. The stage of excitement was strongly marked, with much muscular action and vociferation. After several minutes, the chloroform being exhausted, forty or fifty minims more were poured on the sponge, and inhaled at intervals. While the vociferation and struggling yet continued, some stertor appeared, and the sponge was at once withdrawn. In another minute, full stertor came on; the face, without any pallor, showed a dusky livid hue, the pulse ceased, and the respiration was becoming visibly slower. Mr. Field had not begun the operation. We instantly commenced artificial respiration, and slapped the face and chest with a wet towel, but only a few more inspirations, or gasps, could be obtained. We continued the same means,

took blood from the jugular vein, which was turgid, rubbed the limbs, and applied electro-magnetism, with the kind assistance of two other medical men; but after the lapse of an hour, no sign of life being elicited, and the body becoming cold, further efforts were evidently useless. On a *post-mortem* examination, the heart was found loaded with fat, its muscular substance thin and weak, and the walls of the right auricle and ventricle in a state of fatty degeneration. These same cavities (the right) were gorged with fluid blood. The valves and great vessels were healthy, and no other organ appeared to be in any abnormal state. Death had clearly occurred from failure of the heart's action, induced much more readily than could have happened under natural circumstances by chloroform, owing to the weakened and encumbered condition of the heart. *Case* 2.—On November 19th, an inquest was held at Paddington, on the body of Edwin Hambly, aged eight years, whose death occurred while under the influence of chloroform. Mr. Edwards, chloroformist to St. Mary's Hospital, deposed that he had held that position for the last eight years. The deceased was admitted to the institution on the 25th of October to undergo a plastic operation to remove a great deformity, occasioned by a burn in the chin, which had the effect of drawing it down to an unusual degree, and turning the under lip inside out. On the Wednesday following, the day appointed for the operation, witness administered the chloroform gently. It took ten minutes to get the boy under its influence, and then the operation was commenced by Mr. Lane, the senior surgeon. Just before the conclusion deceased fainted, and, with a view to restore him, witness promptly commenced artificial respiration, which he kept up for half an hour. Failing in his efforts, he was put in a warm bath, and galvanism was applied for an hour and a half, but without success. Witness believed that the poor boy died instantly he fainted from paralysis of the heart. This was the first and only fatal chloroform case he ever had since the opening of St. Mary's Hospital, now over ten years, during which time chloroform had been successfully administered to upwards of 4,000 persons. In a *post mortem* examination they found all the organs healthy, and no trace of disease anywhere. Death was solely from paralysis of the heart from the effects of chloroform. He never had a case die before from chloroform. The strangest part of this affair was that, when death took place, the boy was apparently recovering from the effects of the chloroform. Other medical gentlemen who were examined fully corroborated the evidence of Mr. Edwards, and testified to his great experience and his remarkable caution in the administration of chloroform. The jury returned a verdict that the deceased instantly died during the performance of a surgical operation upon him from the effects of a failure of the action of his heart, occasioned by chloroform accidentally and by misfortune.—*British Medical Journal.*

Effects of Religious Excitement.—The annual report of the Irish Lunatic Asylum Inspectors states, that more cases of insanity occurred in Ulster in two months, during the late revival movement, than had taken place in the year. "Religious excitement" is assigned as the cause of insanity in 97 males and 86 females, but it is observable that, though religious excitement was the cause of the breaking down of the mind, the mania is not generally religious. The patient does not rave about religious subjects, but about matters totally different. The religious excitement, like any other violent epidemic excitement, caused the mind to give way in its weakest point, whatever that might have been. "Intemperance and irregularity of life" were the causes of the disease in 241 males and 82 females.—*Brit. Med. Jour.*

Cholera in India.—Up to this date not less than 500 English soldiers have fallen victims to cholera, chiefly in the military stations of Delhi, Meerut, Umballa, and above all, Lahore. The epidemic has now raged for six weeks. It showed itself first in a virulent form at Delhi and Meerut. This is the fifth visitation of the kind since 1842. The wave of pestilence has alternately swept down from Cabul to Eastern and Central India, and up from the East into Central Asia, following the Gangetic valley and the great commercial routes. Wherever it has attacked English soldiers it has spared the native troops and prisoners in the vicinity. The effect on the troops at Lahore has been most depressing. The Mean-Meer Brigade has been moved out of cantonments into camp. The medical men available have been overworked. Government, it is said, have appointed a commission of medical and engineer officers to inquire into the circumstances.—*Brit. Med. Jour.*

Physicians' Penmanship.—There should be a very clear understanding between physicians and dispensers; hence, when the latter complain that they have often the greatest difficulty in deciphering the hieroglyphics which are intended to guide them in preparing medicines ordered, that complaint deserves serious attention. It is needless to insist upon the evils of this imperfect understanding. They are very apparent. The statement has been made before; and since it is again urgently repeated, it must be concluded that there are many prescribers who habitually adopt an obscure and illegible hand in writing their formulæ. The time has gone by when kings and princes neglected their caligraphy, and when to write badly was an indication of learning or fashion, mainly because those who possessed neither quality could not write at all. To attempt to preserve this tradition is to interpret history badly, and to sacrifice to that interpretation a very clear duty. The opinion that such caligraphic obscurity as is complained of is the deliberate consequence of a foolish conviction, may be dismissed; it is more charitable and more just to assign it to hurry and want of care. Physicians cannot all be exquisite penmen; but perfect clearness and accuracy may always be obtained at the cost of a little care, and no less can be expected where the opposite qualities may be so dangerous.—*Lancet.*

Lunacy in Ireland.—It appears that the number of persons more or less afflicted with mental disease still at large is 7,120. Of these, 5,469 are idiotic, and 1,651 are insane. Idiotcy prevails more amongst males than females, the number of the former being 3,148, and of the latter 2,321. Among lunatics the difference is not so great, the numbers being 866 males and 785 females. There are 2,534 lunatics and epileptics in workhouses. During the years 1860 and 1861 the number admitted into the district asylums is 2,575, of whom the large proportion of 1,201 have been completely restored to health. The average number under treatment has been 8,411. The proportion of recoveries on the number admitted is about 47 per cent.; on the whole number under treatment it is 14·27. The reason of the difference is that those patients who are really curable are restored, under judicious treatment, in the course of the first three or four months, if they are admitted in time. If not, these cases are almost hopeless. Where the origin of the disease is known, it is traced to hereditary transmission in 37 per cent. of the cases. The hereditary mental taint gradually wears out by intermixture of blood. Among married lunatics, wives are more numerous than husbands. More than half the insane—56 per cent.—are uneducated.—*Brit. Med. Jour.*

Ethics of Vivisections.—Useless barbarities cannot be reprobated too strongly. The most accomplished physiologists are also the most humane; but a wide latitude must be left to each man, who will be individually responsible for the use which he makes of this power. Bell grieved over the rabbits which he sacrificed; and Dr. Brown-Séquard regarded with almost the affection of a parent a pet guinea-pig in which he had succeeded in artificially producing epilepsy; that guinea-pig, in fact, contributed greatly to the progress of medical science, and was worthy of his affection. Marshall Hall first removed the brain of his frogs, thus destroying all consciousness, before proceeding with his experiments on the diastaltic function.—*Lancet.*

TO CORRESPONDENTS.

J. C. R. (*Dayton, O.*).—The case referred to was put on record. Can you give references to any *recent* cases in Ohio?

M. A. B. (*England*).—Letter and pamphlets duly received. The subject has our hearty support, and we shall return to it hereafter.

Query.—Will any of your Correspondents inform us how great a proportion of ophthalmic complaints are due to the economy in sunlight and the extravagance in artificial light, which are so constantly practised in this community? LUX.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 9th day of December to the 16th day of December, 1861.

Abstract of the Official Report.

Deaths.—Men, 96; women, 93; boys, 108; girls, 109—total, 401. Adults, 189; children, 212; males, 199; females, 202; colored, 8. Infants under two years of age, 140. Children reported of native parents, 26; foreign, 146.

Among the causes of death we notice:—Apoplexy, 2; Infantile convulsions, 17; croup, 12; diphtheria, 13; scarlet fever, 35; typhus and typhoid fevers, 11; cholera infantum, 0; cholera morbus, 0; consumption, 58; small-pox, 9; dropsy of head, 13; infantile marasmus, 24; diarrhœa and dysentery, 2; inflammation of brain, 14; of bowels, 7; of lungs, 27; bronchitis, 11; congestion of brain, 13; of lungs, 6; erysipelas, 3; whooping cough, 2; measles 2. 208 deaths occurred from acute disease, and 41 from violent causes. 253 were native, and 148 foreign; of whom 93 came from Ireland; 7 died in the Immigrant Institution, and 46 in the City Charities; of whom 11 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Dec. 1861	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Saturtion, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	IN.	IN	°	°	°	°	°			
8th.	29.99	.11	46	38	53	4½	8	S.W.	2	741
9th.	29.91	10	53	45	61	5	8	S.W.	1.5	727
10th.	29.87	21	53	45	60	2	4	NE. to SE.	9	841
11th.	29.91	50	36	28	44	6	9	W.	5	647
12th.	30.51	11	27	22	33	5	7	N W.	0	667
13th.	30.41	.11	33	25	40	6	9	W.	2	600
14th.	30.31	.11	40	32	47	7	10	W.	.07	601

REMARKS.—8th, Wind fresh A.M. 9th, Fog A.M. 10th, Fog till 10 A.M., and from 4 to 8 P.M., calm nearly all day 11th, Rain from 8 to 11 A.M., clear P.M. 12th, Wind mostly strong during the day, barometer very high. 13th, Wind mostly strong during the day, variable sky P.M. 14th, Fresh wind A.M., variable sky late at night.

MEDICAL DIARY OF THE WEEK.

Monday, Dec. 23.
- NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.

Tuesday, Dec. 24.
- NEW YORK HOSPITAL, Dr. Watson, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, Dec. 25.
- NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M.

Thursday, Dec. 26.
- NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
- PATHOLOGICAL SOCIETY, half-past 7 P.M.

Friday, Dec. 27.
- NEW YORK HOSPITAL, Dr. Watson, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Flint, half-past 1 P.M.
- EYE INFIRMARY, Dr. Noyes, half-past 1 P.M.

Saturday, Dec. 28.
- NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Wood's Clinic, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

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